

## **REMARKS**

Claims 98 and 106-121 are now pending in this application. Claims 98 and 115 have been amended; claim 121 has been added. In the Final Office Action dated September 22, 2004 ("Final Office Action"), the Office rejected claims 98 and 106-120. Applicants now present the following remarks and arguments asserting the patentability of the pending claims.

### **I. New Claim 121**

Applicants have added new claim 121, which recites an at least one first polymer chosen from ethylenediamine/stearyl dimer dilinoleate copolymer. The original specification provides support for this new claim in at least the paragraph bridging pages 11 and 12, which recites Uniclear® and that Uniclear® may be "a blend of copolymers of a C<sub>36</sub> diacid condensed with ethylenediamine." The International Cosmetic Ingredient Dictionary and Handbook, 10th Ed. (2004) ("CTFA"), at pages 657-658 and 3583 (attached herewith as Exhibit A), states that ethylenediamine/stearyl dimer tallate copolymer is at least one copolymer of ethylenediamine and tall oil dimer acid monomers and that ethylenediamine/stearyl dimer dilinoleate copolymer is at least one copolymer of ethylenediamine and dilinoleic acid monomers, both end-blocked with stearyl alcohol and a trade name for both being Uniclear®. Thus, the specification reasonably conveys this recited copolymer and Applicants respectfully request that claim 121 be entered.

Applicants note that, in co-pending Application Serial Nos. 09/937,314, 10/012,051, and 10/203,018, the Office requested that those Applicants provide some

documentation showing that this species of polyamide polymer (*i.e.*, that known by the trade name Uniclear®) was known at the time these co-pending applications were filed. Accordingly, the Office was provided with a redacted version of confidential proprietary documents from the Assignee company showing that ethylenediamine/stearyl dimer tallate and dilinoleate copolymers were known as Uniclear® prior to the filing date of the applications. See Exhibit B (Redacted Proprietary Documents). The Office also indicated that the same documentation would be required in the present case.

Applicants do not believe, however, that the requested confidential proprietary documents are either necessary or legally required. As discussed above, the specification describes the copolymers known as Uniclear® and necessarily establishes that this species of at least one heteropolymer was known at the time the application was filed. The information supplied from the CTFA further demonstrates that Uniclear® is the trade name for ethylenediamine/stearyl dimer tallate copolymer and ethylenediamine/stearyl dimer dilinoleate copolymer, which establishes that the at least one polyamide polymer claimed was known at the time of filing. However, solely in an effort to advance prosecution of this case, Applicants attach a copy of the redacted confidential proprietary documents in Exhibit B.

Based on this supporting evidence, the original specification would convey to one of ordinary skill in the art that the Applicants had possession of the recited polymers at the time this invention was filed. Therefore, no new matter is added by this amendment and Applicants respectfully request that it be entered without objection.

## II. Rejections Under 35 U.S.C. § 112, First Paragraph

The Office rejected claims 98 and 106-120 under 35 U.S.C. § 112, first paragraph, for failure to comply with the written description requirement, asserting that the specification does not contain support for the heterocyclic ring systems recited in the description of the R<sup>4</sup> group of formula (I). See Final Office Action at page 2. In addition, the Office alleges that the specification neither describes nor exemplifies any compound within the recited “organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms, and nitrogen atoms” of the R<sup>3</sup> group of formula (I). See *id.* at page 3. Finally, the Office also specifically rejected claim 115, alleging that the specification does not contain support for an organic solvent being “alkanes having from 6-10 carbon atoms.” *Id.* Applicants disagree and respectfully traverse these rejections.

### A. The Office Has Misunderstood The Claims

As evidenced by both the rejections under 35 U.S.C. § 112, first paragraph, and § 103(a), Applicants point out that the Office has misunderstood the claims. In both rejections, the Office indicates its belief that the polymers of formula (I) are required in independent claim 98. However, claim 98 recites at least one first polymer with a weight-average molecular weight of less than or equal to 100,000 comprising a polymer backbone and at least one fatty chain. Only claims 106-107 and 121 recite at least one first polymer of formula (I) or a species thereof. The Office’s reading of a limitation from a dependent claim into an independent claim is based on a misunderstanding. See 35 U.S.C. § 112, third and fourth paragraphs; *see also Dana Corp. v. Am. Axle & Mfg., Inc.*, 279 F.3d 1372, 1376 (Fed. Cir. 2002) (“dependent claims necessarily add limitations to the claims from which they depend”).

### B. Test for Written Description

Possession is the cornerstone of the written description requirement: “the test for compliance with § 112 has always required sufficient information in the original disclosure to show that the inventor possessed the invention at the time of the original filing.” *Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1320 (Fed. Cir. 2003). An applicant can show possession by pointing out adequate or sufficient description for the claims in the original specification, as would be understood by one of ordinary skill in the art. See MPEP § 2163(I).

### C. R<sup>4</sup> Group and “Heterocyclic Structure”

In regards to the R<sup>4</sup> group recited in formula (I) of claim 106,<sup>1</sup> the specification clearly contains sufficient support for heterocyclic structures and ring systems in at least the paragraphs beginning at line 27 on page 9 and ending at line 25 on page 11. Specifically, lines 17-23 on page 10 explain that the R<sup>4</sup> group of formula (I) is chosen from one of a hydrogen atom, a C<sub>1</sub> to C<sub>10</sub> alkyl group, and a direct bond to R<sup>3</sup> or to another R<sup>4</sup>. This disclosure further explains that when the R<sup>4</sup> group is a direct bond, heterocyclic ring systems are possible that are defined in part by R<sup>4</sup>-N-R<sup>3</sup>. Moreover, lines 27-28 of page 9 specifically mention U.S. Patent No. 5,783,657 (“the ‘657 patent”) for when the at least one heteropolymer is at least one polyamide polymer of formula (I). The ‘657 patent, in at least column 6, line 9 to column 7, line 14, clearly describes to one of ordinary skill in the art the heterocyclic ring systems and structures possible with

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<sup>1</sup> Applicants note that the Office has not rejected any specific claim having R<sup>4</sup> groups, but Applicants believe the Office intended for this rejection to apply to claim 106, which recites the polymer of formula (I). If Applicants’ understanding is incorrect, Applicants specifically request clarification on the record.



the R<sup>4</sup> groups of formula (I). In light of the description in the aforementioned paragraph of this application, taken together with the disclosure of the '657 patent, the recitation of heterocyclic structures for the R<sup>4</sup> groups of formula (I) has adequate support in the specification to satisfy the written description requirement, i.e., one of ordinary skill in the art would readily understand Applicants to have possessed the heterocyclic structures and ring systems possible with the R<sup>4</sup> groups at the time this application was filed.

In further support of this position, Applicants present the enclosed Declaration Under 37 C.F.R. § 1.132 of Stacy Sterphone ("Sterphone Declaration"). As shown by the Declaration, Ms. Sterphone has extensive experience with cosmetic formulations. *See* paragraphs 2-3. As can be seen from the Declaration, it is readily apparent to one of skill in the art that the R<sup>4</sup> groups recited in the claimed formula (I) would form heterocyclic structures. *See* paragraphs 7-7d. Ms. Sterphone explains in her Declaration that the present specification's description of the R<sup>4</sup> groups of formula (I), and the specific reference to the '657 patent, reveals the Applicants' possession of these heterocyclic structures. *See id.* The Declaration is, therefore, further evidence that one of ordinary skill in the art would understand the Applicants to have possessed the claimed heterocyclic structures possible with the R<sup>4</sup> groups of formula (I) from the descriptions provided in the original specification. Because the specification contains adequate written description for these heterocyclic structures, Applicants respectfully request this rejection be withdrawn.

D. R<sup>3</sup> Group and "Organic Groups"

In regards to the R<sup>3</sup> group of formula (I) in claim 106,<sup>2</sup> the specification clearly contains sufficient support for the organic groups possible for the R<sup>3</sup> groups of formula (I) in at least the paragraphs beginning at line 27 on page 9 and ending at line 25 on page 11. Lines 14-17 on page 10 explain that the R<sup>3</sup> group may be chosen from organic groups in part comprising at least two carbon atoms. Lines 18-21 on page 11 then give concrete and specific examples of possible R<sup>3</sup> groups: C<sub>2</sub> to C<sub>36</sub> hydrocarbonaceous groups, C<sub>2</sub> to C<sub>12</sub> hydrocarbonaceous groups, and polyoxyalkylenated groups. The next paragraph, lines 22-25 on page 11, also defines specific types of hydrocarbonaceous groups and provides examples thereof. As above, the '657 patent, specifically mentioned in lines 27-28 on page 9, further clearly describes the organic groups possible for the R<sup>3</sup> groups of formula (I) to one of ordinary skill in the art in at least column 6, line 9 to column 7, line 14, and specifically column 6, lines 9-65. In light of the above-noted description in the specification, taken together with the specific disclosure of the '657 patent, the claimed recitation of R<sup>3</sup> groups of formula (I) has adequate support in the original specification to satisfy the written description requirement.

The enclosed Sterphone Declaration provides additional evidence of this support. As can be seen from the Declaration, the organic groups possible with the R<sup>3</sup> groups recited in the claimed formula (I) are readily apparent to one of ordinary skill in the art.

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<sup>2</sup> Applicants note that the Office has not rejected any specific claim having R<sup>3</sup> groups, but Applicants believe the Office intended for this rejection to apply to claim 106, which recites the polymer of formula (I). If Applicants' understanding is incorrect, Applicants specifically request clarification on the record.

See paragraphs 8-8c. Ms. Sterphone explains in her Declaration that the present specification's description of the R<sup>3</sup> groups, by both its provided examples and its specific reference to the '657 patent, reveals the Applicants' possession of these organic groups. *See id.* Thus, the Sterphone Declaration is further evidence that one of ordinary skill in the art would understand the Applicants to have possessed the claimed organic groups possible with the R<sup>3</sup> groups of formula (I) from the descriptions provided in the original specification. Because the specification contains adequate written description for these organic groups, Applicants respectfully request that this rejection be withdrawn.

E. Claim 115 and Alkanes

The Office rejected claim 115, alleging that the specification does not contain support for an organic solvent being "alkanes having from 6-10 carbon atoms." See Final Office Action at page 4. While Applicants do not agree with this rejection, Applicants have herein amended claim 115 to recite "linear alkanes having from 6 to 10 carbon atoms" (emphasis added) solely in an effort to advance the prosecution of this application. Support for this amendment, and the claim generally, is found in the original specification in at least the paragraph bridging pages 16 and 17. As such, Applicants believe that the specification contains adequate written description support for amended claim 115 and respectfully request the withdrawal of this rejection.

**III. Rejection Under 35 U.S.C. § 112, Second Paragraph**

The Office rejected claims 98 and 106-120 under 35 U.S.C. § 112, second paragraph, alleging that claim 98 was ambiguous because it recited two embodiments

with the same meaning. See Final Office Action at page 4. Without admitting the propriety of the rejection or the Office's analysis of the claim terms either under this rejection or in the rejection under 35 U.S.C. § 103(a), and solely in an effort to advance the prosecution of this application without affecting the scope of the claims, Applicants have amended claim 98 to remove "non-therapeutically treating nails," thereby obviating this rejection. As such, Applicants respectfully request that this rejection be withdrawn.

#### **IV. Rejection under 35 U.S.C. § 103(a)**

The Office rejected claims 98 and 106-120 under 35 U.S.C. § 103(a) as obvious over the combination of U.S. Patent No. 6,497,861 to Wang et al., No. 5,783,657 to Pavlin et al., and No. 5,972,095 to Graves et al. The Office alleges that Wang et al. teaches a stable cosmetic emulsion with a polyamide gelling agent, as well as non-volatile oils, organic solvents, certain volatile solvents, and film-formers. See Office Action at page 5. Admitting that Wang et al. does not teach the volatile solvents of claims 115-118, the Office turns to Graves et al. for these elements. Finally, the Office asserts that the reference to Pavlin et al. in the disclosure of Wang et al. teaches the polymers of formula (I).<sup>3</sup> The Office believes that a skilled artisan would have been motivated to combine these three references since all the ingredients were "used in the same cosmetic art." *Id.* Applicants respectfully disagree with this rejection for at least the following reasons.

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<sup>3</sup> As discussed in § II(A), only claims 106-107 and 121 recite a polymer of formula (I) or a species thereof.

A. Wang et al. Is Not Prior Art

The Office notes that the certified translation of U.S. Provisional Application No. 60/330,767 filed October 30, 2001, does not specifically recite the provisional application by number on its cover page. See Final Office Action at pages 4-5. Applicants have indeed noted that the cover page of the previously submitted certified translation is missing this identifying information. For the Examiner's convenience, a new certified translation is submitted herewith that correctly indicates the identifying information of the provisional application to which priority is claimed. See Exhibit C.

This application also claims priority under 35 U.S.C. § 119 to French Patent Application No. 01 00623 filed January 17, 2001. The French priority document is the same as the provisional application; as such, the certified translation of the provisional application is also an English-language translation of the French priority document.

Applicants note that Wang et al. can only be prior art under 35 U.S.C. § 102(e) because, although it issued as a U.S. patent after the filing date of this application, it was based on an application with an effective U.S. filing date before the filing date of this application. However, the French priority application for this application was filed on January 17, 2001, before the earliest effective U.S. filing date of Wang et al. on June 21, 2001. As such, Applicants submit that Wang et al. is not prior art under 35 U.S.C. § 102(e) to this application and, thus, cannot form part of a valid obviousness rejection under 35 U.S.C. § 103.

B. Discussion of Remaining Cited References

To establish a *prima facie* case of obviousness, the Office must show that the cited reference provides to one of ordinary skill in the art some suggestion or motivation

to combine or modify its teachings in an effort to achieve all of the limitations of the claimed invention, with a reasonable expectation of success. See MPEP § 2143.

Applicants believe that neither of the remaining cited references, either separately or in any combination, satisfies this test for a *prima facie* case of obviousness and, therefore, respectfully traverse this rejection.

The Office relies on U.S. Patent No. 5,783,657 to Pavlin et al. for teaching a polymer of formula (I), while the Office asserts that U.S. Patent No. 5,972,095 to Graves et al. teaches “nail enamel compositions using solvents” for the “beneficial effect to the nails.” Office Action at page 5. These two references, however, cannot properly support a *prima facie* of obviousness according to the above-stated test.

Independent claim 98, as amended, recites a cosmetic process for making up the nails of human beings comprising applying to the nails of human beings an effective amount of a composition comprising at least one organic solvent and at least one first polymer present in a combined amount to give a structured composition. Neither of the cited references, either alone or in combination, teaches or suggests all of these claimed elements or provides any motivation to one of ordinary skill in the art to modify their disclosures in an attempt to achieve the presently claimed invention. Pavlin et al. teaches only that its polymers may be “formulated into personal care products” (col. 17, lines 24-25), without discussing any use in a cosmetic process for making up the nails.

Graves et al. teaches nail enamels “made faster drying by incorporating a particular class of vinyl-silicone copolymers,” while a dimethicone anti-foaming agent is used to avoid bubbling (see abstract). Graves et al., however, fails to teach or suggest the use of at least one first polymer according to independent claim 98. While the

reference does mention the use of “thixotropic agents for enhancing the suspension of pigment” (col. 7, lines 8-9), it mentions only those “generally used in the nail enamel art,” like clays (col. 7, lines 10-13). Graves et al. does not contemplate or suggest that at least one first polymer, as presently claimed, would be operable in its specific fast-drying nail enamel formulation.

Moreover, Graves et al. actually teaches away from upsetting its careful chemical balance because of the adverse bubbling effects of certain additives, like film formers, polymers, and solvents. See col. 1, lines 39-67, discussing how the incorporation of a particular copolymer into the nail formulations therein caused such adverse effects that “the product was not commercially viable or useful.” See also MPEP § 2143.02 (“A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention”) (emphasis in original). In light of this teaching, one of ordinary skill would not have been motivated to incorporate at least one first polymer, as presently claimed, into the nail enamel compositions of Graves et al., for fear that it may render them unsatisfactory for their intended purpose. See MPEP § 2143.01. And certainly a skilled artisan would have had no reasonable expectation of success in incorporating such a polymer into the compositions of Graves et al. in an effort achieve the claimed invention, in light of this teaching.

Neither reference teaches or suggests the use of an at least one first polymer, as recited in claim 98, in a composition comprising part of a cosmetic process for making up nails. Moreover, neither reference teaches or suggests that the use of the claimed at least one first polymer would result in a structured composition when combined with at least one volatile solvent. A skilled artisan would not have had any reasonable

expectation of success in combining the references to achieve such a composition, even if some motivation to combine was actually suggested or such a combination was thought to be desirable. *See In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984) ("The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification."). Any assertion of a combination must be the result of impermissible hindsight, and it is clearly insufficient to "find every element of a claimed invention in the prior art [and for] an examiner to use the claimed invention itself as a blue print for piecing together elements . . . . Such an approach would be an illogical and inappropriate process by which to determine patentability." *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998) (quotations and citations omitted).

At most, Pavlin et al. and Graves et al. only make their possible combination "obvious to try," which is clearly not a proper standard for determining obviousness. Rather, an obviousness determination must be based on what a skilled artisan would actually have taken from the prior art's teachings and suggestions. *See In re O'Farrell*, 853 F.2d 894 (Fed. Cir. 1988). Based on the above facts and arguments, Applicants have shown that the cited references cannot properly support a *prima facie* case of obviousness. Therefore, Applicants respectfully request that the Examiner withdraw the rejection and allow the pending claims.

## **V. Commonly Assigned Co-Pending Applications and Patents**

In the Amendment filed on June 29, 2004, Applicants noted in Table 2 information regarding several co-pending applications, including the present application,



and submitted copies of the pending claims as of that date for every case identified in that table. In the following continuation of Table 2, Applicants have noted five additional applications that have been filed and enclose herewith in Exhibit D a copy of the co-pending claims for those cases. Also provided in Exhibit D are copies of the currently pending claims from the following co-pending applications whose claims have been amended since June 29, 2004: 09/618,066; 09/685,577; 09/685,578; 09/733,896; 09/733,898; 09/733,899; 09/733,900; 09/937,314; 10/012,029; 10/012,051; 10/012,052; 10/047,987; 10/182,830; 10/198,931; 10/203,018; 10/203,374; 10/699,780; 10/746,612; 10/787,440; and 10/787,441. Applicants submit these claims for the Office's convenience in evaluating any potential issues regarding statutory or obviousness-type double patenting. Finally, Applicants note that Application No. 10/618,315 has now been expressly abandoned.

**Table 2 (continued) — Co-Pending Applications and Patents**

Attorney Docket No.	U.S. Patent Application No.	U.S. Filing Date or §371(c) Date	Inventor(s)	Title	Assignment Recorded (Reel, Frame, Date)	Publication Date
05725.0808-02000	10/918,579	August 16, 2004	Carlos O. PINZON, Paul THAU, and Isabelle BARA	COMPOSITIONS CONTAINING HETEROPOLYMERS AND OIL-SOLUBLE ESTERS AND METHODS OF USING SAME	Reel 011654, Frame 0869, on April 2, 2001	U.S. Published Application No. US 2005-0019358 A1, on January 27, 2005
05725.0932-01000	10/933,431	November 22, 2004	Véronique FERRARI	A TRANSFER-FREE COMPOSITION STRUCTURED IN RIGID FORM BY A POLYMER	Reel 012476, Frame 0507, on January 17, 2002	Not yet published

Attorney Docket No.	U.S. Patent Application No.	U.S. Filing Date or § 371(c) Date	Inventor(s)	Title	Assignment Recorded (Reel, Frame, Date)	Publication Date
05725.1003-01000	10/993,430	November 22, 2004	Nathalie COLLIN	COSMETIC COMPOSITION COMPRISING A POLYMER BLEND	Reel 013142, Frame 0645, on August 1, 2002	Not yet published
05725.1004-01000	10/990,475	November 18, 2004	Nathalie COLLIN	USE OF A POLYMER FOR OBTAINING AN EXPRESS MAKE-UP OF KERATIN MATERIALS	Reel 012847, Frame 0285, on April 30, 2002	Not yet published
05725.1378-00000	11/019,382	December 23, 2004	Wei YU and Véronique FERRARI	COSMETIC COMPOSITION COMPRISING TWO DIFFERENT HETERO POLYMERS AND METHOD OF USING SAME	Not yet filed/recorded	Not yet published

## VI. Information Disclosure Statement

Applicants appreciate the Office's return of the signed Form PTO-1449 from the Information Disclosure Statement submitted on June 29, 2004. Applicants note that page 1 of this Form PTO-1449 was missing and that several of the documents listed on this Form were crossed through, rather than initialed. In addition, Applicants note that the Office's return of the page 3 of the signed Form PTO-1449 from the Information Disclosure Statement submitted on September 10, 2003, did not include the Examiner's initials in the left-hand column, but only a signature at the bottom. Applicants believe that those documents were properly listed and respectfully request that the Office consider the documents and indicate that the documents were considered. For the

Office's convenience, Applicants submit herewith a new Information Disclosure Statement and IDS Form PTO/SB/08, which includes all of the documents on page 1 of the Form PTO-1449 submitted on June 29, 2004, on page 3 of the Form PTO-1449 submitted on September 10, 2003, as well as those crossed through by the Office on the Form PTO-1449 submitted on June 29, 2004. If the Office disagrees with the submission, Applicants would greatly appreciate the citation of a regulation or PTO rule establishing that Applicants' submission is improper.

Finally, Applicants' representatives understand from the Examiner that in other related co-pending applications the Examiner considered references cited in the Forms PTO-1449 or SB/08 filed, but that she had crossed through some of the citations and did not initial the entries to avoid the printing of the those documents on the face of any patent granted there from. In the present case, in light of the Examiner's representations regarding the crossing-out of references in the related co-pending applications, Applicants will consider any entries crossed through by her as having been properly submitted and considered by the Examiner, unless the Examiner specifically states otherwise in the papers returning the form.

## **VII. Conclusion**

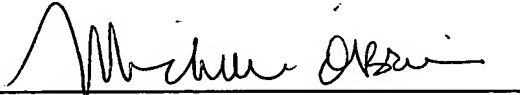
In view of the foregoing amendments and remarks, Applicants respectfully request the reconsideration and the continued examination of this application and the timely allowance of the pending claims. In the event that the Office does not believe this application is in immediate condition for allowance, Applicants respectfully request that the Office contact the undersigned to discuss an appropriate resolution.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: March 22, 2005

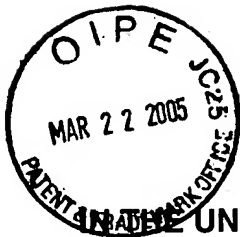
By:   
Michelle E. O'Brien  
Reg. No. 46,203

Telephone: 202-408-4307  
Facsimile: 202-408-4400

Enclosures

- Exhibit A      Entries for "ethylenediamine/stearyl dimer dilinoleate copolymer,"  
                         "ethylenediamine/stearyl dimer tallate copolymer," and "Uniclear"  
                         CTFA 10th Ed. (2004), pages 657-658 and 3583
  - Exhibit B      Redacted Proprietary Documents
  - Exhibit C      Copy of Certified Translation of U.S. Provisional Application  
                         No. 60/330,767 (Corresponding to French App. No. 01 00623)
  - Exhibit D      Claims from Co-Pending Cases
- Declaration Under 37 C.F.R. § 1.132 of Stacy Sterphone

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REPLY TO FINAL OFFICE ACTION  
Application Serial No. 10/046,568  
Attorney Docket No. 05725.1018-00000

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Xavier BLIN et al.

Application No.: 10/046,568

Filed: January 16, 2002

For: NAIL POLISH COMPOSITION  
COMPRISING A POLYMER

)  
)  
) Group Art Unit: 1615  
)  
) Examiner: Jyothsna A. VENKAT  
)  
)  
) Confirmation No.: 1780  
)

**EXHIBIT A**

International Cosmetic Ingredient Dictionary and Handbook, 10th Ed. (2004)  
Pages 657-658 and 3583

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# **International Cosmetic Ingredient Dictionary and Handbook**

**Tenth Edition  
2004**

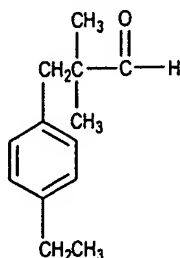
**Editors**  
Tara E. Gottschalck  
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**Volume 1**

***Published by***  
**The Cosmetic, Toiletry, and Fragrance Association**  
1101 17th Street, NW, Suite 300  
Washington, D.C. 20036-4702  
[www.ctfa.org](http://www.ctfa.org)

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**Definition:** Ethyl 2,2-Dimethylhydrocinnamal is the aromatic aldehyde that conforms generally to the formula:



**Information Source:** RIFM

**Chemical Class:** Aldehydes

**Function:** Fragrance Ingredient

**Technical/Other Names:**

alpha,alpha-Dimethyl-p-ethylphenylpropanal (RIFM)  
 $\alpha,\alpha$ -Dimethyl-p-ethylphenylpropanal  
 3-(p-Ethylphenyl)-2,2-Dimethylpropionaldehyde

**Trade Name:**

Floralozone (International Flavors & Fragrances)

#### ETHYLENE/ACRYLIC ACID COPOLYMER

**CAS No.:** 9010-77-9

**Definition:** Ethylene/Acrylic Acid Copolymer is a copolymer of ethylene and acrylic acid monomers.

**Information Sources:** 21CFR177.1310, 21CFR178.1005, CIR: [SQ] IJT 21(SUPPL. 3) 2002

**Chemical Class:** Synthetic Polymers

**Functions:** Binder; Film Former; Viscosity Increasing Agent - Nonaqueous

**Technical/Other Name:**

2-Propenoic Acid with Ethene

**Trade Names:**

A-C Copolymer 540 (Honeywell)  
 A-C Copolymer 580 (Honeywell)  
 A-C Copolymer 540A (Honeywell)  
 AEC Ethylene/Acrylic Acid Copolymer (A & E Connock)  
 EA-209 (Kobo)

#### ETHYLENE/ACRYLIC ACID/VA COPOLYMER

**CAS No.:** 26713-18-8

**Definition:** Ethylene/Acrylic Acid/VA Copolymer is a copolymer of ethylene, acrylic acid and vinyl acetate monomers.

**Information Source:** CIR: [SQ] IJT 21 (SUPPL. 3) 2002

**Chemical Class:** Synthetic Polymers

**Functions:** Binder; Film Former; Viscosity Increasing Agent - Nonaqueous

**Technical/Other Name:**

2-Propenoic Acid, Polymer with Ethene and Ethenyl Acetate

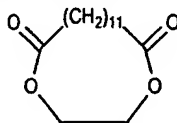
#### ETHYLENE BRASSYLATE

**CAS No.**  
105-95-3

**EINECS No.**  
203-347-8

**Empirical Formula:**  
 $C_{15}H_{26}O_4$

**Definition:** Ethylene Brassylate is the cyclic ester that conforms to the formula:



**Information Sources:** 21CFR172.515, RIFM, TSCA

**Chemical Class:** Esters

**Function:** Fragrance Ingredient

**Reported Product Categories:** Foundations; Moisturizing Preparations; Cleansing Products (Cold Creams, Cleansing Lotions, Liquids and Pads); Personal Cleanliness Products, Misc.

**Technical/Other Names:**

1,4-Dioxacycloheptadecane-5,17-dione  
 Ethylene brassylate (RIFM)  
 Ethylene Undecane Dicarboxylate

**Trade Name:**

AEC Ethylene Brassylate (A & E Connock)

#### ETHYLENE/CALCIUM ACRYLATE COPOLYMER

**CAS No.:** 26445-96-5

**Empirical Formula:**  
 $(C_3H_4O_2 \cdot C_2H_4)_x \cdot xCa$

**Definition:** Ethylene/Calcium Acrylate Copolymer is a copolymer of ethylene and calcium acrylate monomers.

**Information Sources:** 21CFR175.105, CIR: [SQ] IJT 21(SUPPL. 3) 2002

**Chemical Class:** Synthetic Polymers

**Functions:** Binder; Film Former

**Technical/Other Name:**

2-Propenoic Acid, Polymer with Ethene, Calcium Salt

#### ETHYLENE CARBONATE

**CAS No.**  
96-49-1

**EINECS No.**  
202-510-0

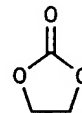
**JPN Translation:**

炭酸エチレン

**Empirical Formula:**

$C_3H_4O_3$

**Definition:** Ethylene Carbonate is the organic compound that conforms to the formula:



**Information Sources:** JCIC, JCLS

**Chemical Class:** Esters

**Function:** Solvent

**Technical/Other Name:**

1,3-Dioxolan-2-one

#### ETHYLENEDIAMINE/DIMER TALLATE COPOLYMER BIS-HYDROGENATED TALLOW AMIDE

**Definition:** Ethylenediamine/Dimer Tallate Copolymer Bis-Hydrogenated Tallow Amide is a copolymer of ethylenediamine and tall oil dimer acid monomers, end-blocked with Hydrogenated Tallowamine (q.v.).

**Chemical Class:** Synthetic Polymers

**Functions:** Oral Care Agent; Skin-Conditioning Agent - Miscellaneous; Viscosity Increasing Agent - Nonaqueous

**Technical/Other Name:**

Sylvaclear A200

#### ETHYLENEDIAMINE/STEARYL DIMER DILINOLEATE COPOLYMER

**Definition:** Ethylenediamine/Stearyl Dimer Dilinoleate Copolymer is a copolymer of ethylenediamine and Dilinoleic Acid (q.v.) monomers, end-blocked with stearyl alcohol.

**Chemical Class:** Synthetic Polymers

**Functions:** Oral Care Agent; Skin-Conditioning Agent - Miscellaneous; Viscosity Increasing Agent - Nonaqueous

**Trade Name:**

UNICLEAR (Arizona)

#### ETHYLENEDIAMINE/STEARYL DIMER TALLATE COPOLYMER

**Definition:** Ethylenediamine/Stearyl Dimer Tallate Copolymer is a copolymer of ethyl-

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## Ethylenediamine/Stearyl Dimer Tallate Copolymer (Cont.)

enediamine and tall oil dimer acid monomers, end-blocked with stearyl alcohol.

**Chemical Class:** Synthetic Polymers

**Functions:** Oral Care Agent; Skin-Conditioning Agent - Miscellaneous; Viscosity Increasing Agent - Nonaqueous

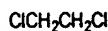
**Trade Name:**  
UNICLEAR (Arizona)

### ETHYLENE DICHLORIDE

**CAS Nos.** **EINECS Nos.**  
107-06-2 203-458-1  
1300-21-6 215-077-8

**Empirical Formula:**  
 $C_2H_4Cl_2$

**Definition:** Ethylene Dichloride is the halogenated aliphatic hydrocarbon that conforms to the formula:



**Information Sources:** 21CFR165.110, 21CFR172.560, 21CFR172.710, 21CFR172.864, 21CFR173.165, 21CFR173.230, 21CFR173.315, 21CFR175.105, 21CFR573.440, EEC(II-125), FCC, MI-13(3831), TSCA

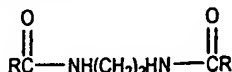
**Chemical Class:** Halogen Compounds

**Function:** Not Reported

**Technical/Other Names:**  
Dichloroethane  
Ethane, 1,2-Dichloro-

### ETHYLENE DIHYDROGENATED TALLOW-AMIDE

**Definition:** Ethylene Dihydrogenated Tallowamide is the diamide that conforms generally to the formula:



where RCO- represents the fatty acids derived from hydrogenated tallow.

**Chemical Class:** Amides

**Function:** Viscosity Increasing Agent - Nonaqueous

**Technical/Other Names:**  
N,N'-1,2-Ethanedylbis(Hydrogenated Tallowamide)  
(Hydrogenated Tallowamide), N,N'-1,2-Ethanedylbis-

### ETHYLENE DILINOLEAMIDE

**Definition:** Ethylene Dilinoleamide is the condensation product of ethylenediamine with Dilinoleic Acid (q.v.).

**Information Sources:** JCIC, JCLS

**Chemical Class:** Amides

**Function:** Skin-Conditioning Agent - Miscellaneous

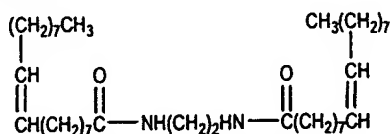
**Technical/Other Name:**  
Condensate of Dilinoleic Acid and Ethylenediamine

### ETHYLENE DIOLEAMIDE

**CAS No.** **EINECS No.**  
110-31-6 203-756-1

**Empirical Formula:**  
 $C_{38}H_{72}N_2O_2$

**Definition:** Ethylene Dioleamide is the diamide that conforms generally to the formula:



**Information Sources:** 21CFR175.300, TSCA

**Chemical Class:** Amides

**Function:** Viscosity Increasing Agent - Nonaqueous

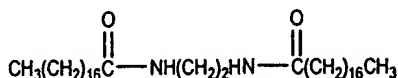
**Technical/Other Names:**  
N,N'-1,2-Ethanedylbis-9-Octadecenamide  
9-Octadecenamide, N,N'-1,2-Ethanedylbis-

### ETHYLENE DISTEARAMIDE

**CAS No.** **EINECS No.**  
110-30-5 203-755-6

**Empirical Formula:**  
 $C_{38}H_{76}N_2O_2$

**Definition:** Ethylene Distearamide is the diamide that conforms to the formula:



**Information Source:** TSCA

**Chemical Class:** Amides

**Function:** Viscosity Increasing Agent - Nonaqueous

**Technical/Other Names:**  
N,N'-1,2-Ethanedylbisoctadecanamide  
N,N'-Ethylene Bisstearamide  
Octadecanamide, N,N'-1,2-Ethanedylbis-

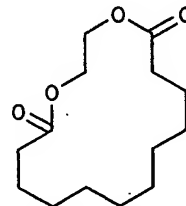
**Trade Name:**  
Lipowax C (Lipo)

### ETHYLENE DODECANEDIOATE

**CAS No.** **EINECS No.**  
54982-83-1 259-423-6

**Empirical Formula:**  
 $C_{14}H_{24}O_4$

**Definition:** Ethylene Dodecanedioate is the organic compound that conforms to the formula:



**Information Source:** RIFM

**Chemical Classes:** Esters; Heterocyclic Compounds

**Function:** Fragrance Ingredient

**Technical/Other Names:**  
Cyclic Ethylene Dodecanedioate  
1,4-Dioxacyclohexadecane-5,16-Dione  
Ethylene dodecanedioate (RIFM)  
Musk C-14

**Trade Name:**  
Zenolide (International Flavors)

### ETHYLENE/MA COPOLYMER

**CAS No.:** 9006-26-2

**JPN Translation:**  
(エチレン/マレイン酸)コポリマー

**Definition:** Ethylene/MA Copolymer is a polymer of ethylene and maleic anhydride monomers.

**Information Sources:** 21CFR175.105, 21CFR177.1210, 21CFR177.1520, JCIC, JCLS, TSCA

**Chemical Class:** Synthetic Polymers

**Functions:** Binder; Film Former; Suspending Agent - Nonsurfactant

**Technical/Other Names:**  
Ethylene/Maleic Anhydride Copolymer  
2,5-Furandione, Polymer with Ethene

### ETHYLENE/MAGNESIUM ACRYLATE COPOLYMER

**CAS No.:** 27515-37-3

**Empirical Formula:**  
 $(C_3H_4O_2 \cdot C_2H_4)_x \cdot xMg$

**Definition:** Ethylene/Magnesium Acrylate Copolymer is a copolymer of ethylene and magnesium acrylate monomers.

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# **International Cosmetic Ingredient Dictionary and Handbook**

**Tenth Edition  
2004**

**Editors**  
Tara E. Gottschalck  
Gerald N. McEwen, Jr., Ph.D., J.D.

**Volume 4**

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Technical/Trade Name	INCI Name	Technical/Trade Name	INCI Name
Unibetaine K (Universal Preserv-A-Chem)	Cocamidopropyl Betaine	Unichem SS (Universal Preserv-A-Chem)	Sodium Stearate
Unibetaine LB (Universal Preserv-A-Chem)	Lauryl Betaine	Unichem THYMOL (Universal Preserv-A-Chem)	Thymol
Unibetaine OLB-50 (Universal Preserv-A-Chem)	Oleyl Betaine	Unichem TIPA (Universal Preserv-A-Chem)	Triisopropanolamine
Unibiovit B-33 (Induchem)	Decyl Oleate (and) Farnesol (and) Ethyl Linoleate (and) Farnesyl Acetate	Unichem ZO (Universal Preserv-A-Chem)	Zinc Oxide
Unibiovit B-332 watersoluble (Induchem)	PEG-12 Glyceryl Laurate (and) PEG-36 Castor Oil (and) Farnesol (and) Ethyl Linoleate (and) Farnesyl Acetate	Unichem ZPS (Universal Preserv-A-Chem)	Zinc Phenolsulfonate
Unibiovit B-332 WS (Lipo)	PEG-12 Glyceryl Laurate (and) PEG-36 Castor Oil (and) Farnesol (and) Ethyl Linoleate (and) Farnesyl Acetate	Unichem ZS (Universal Preserv-A-Chem)	Zinc Stearate
Unicast-CO (Universal Preserv-A-Chem)	Ricinus Communis (Castor) Seed Oil	Unichol (Universal Preserv-A-Chem)	Cholesterol
Unicerin C-30 (Induchem)	Lactose (and) Cellulose (and) Sericin (and) Hydroxypropyl Methylcellulose (and) Iron Oxides	Unichondrin ATP (Induchem)	Butylene Glycol (and) Hydrolyzed Vegetable Protein (and) Adenosine Triphosphate (and) Sodium Chondroitin Sulfate
Unichem ALSUL (Universal Preserv-A-Chem)	Aluminum Sulfate	Unicid 425 Acid (Baker Petrolite)	C20-40 Acid (and) Polyethylene
Unichem AMAL (Universal Preserv-A-Chem)	Ammonium Alum	Unicid 700 Acid (Baker Petrolite)	C40-60 Acid (and) Polyethylene
Unichem BICARB-S (Universal Preserv-A-Chem)	Sodium Bicarbonate	Unicide U-13 (Induchem)	Imidazolidinyl Urea
Unichem CALCARB (Universal Preserv-A-Chem)	Calcium Carbonate	UNICLEAR (Arizona)	Ethylenediamine/Stearyl Dimer Dilinoleate Copolymer (or) Ethylenediamine/Stearyl Dimer Tallate Copolymer
Unichem CALCHLOR (Universal Preserv-A-Chem)	Calcium Chloride	Unicol 50 (Universal Preserv-A-Chem)	Benzalkonium Chloride
Unichem CS (Universal Preserv-A-Chem)	Calcium Stearate	Unicol 123 (Universal Preserv-A-Chem)	Cetearyl Alcohol (and) Steareth-10
Unichem DIPA (Universal Preserv-A-Chem)	Diisopropanolamine	Unicol 1200 (Universal Preserv-A-Chem)	PPG-20
Unichem KI (Universal Preserv-A-Chem)	Potassium Iodide	Unicol CA-2 (Universal Preserv-A-Chem)	Ceteth-2
Unichem LACA (Universal Preserv-A-Chem)	Lactic Acid	Unicol CA-4 (Universal Preserv-A-Chem)	Ceteth-4
Unichem MC (Universal Preserv-A-Chem)	Magnesium Carbonate	Unicol CA-10 (Universal Preserv-A-Chem)	Ceteth-10
Unichem MENT (Universal Preserv-A-Chem)	Menthol	Unicol CPS (Universal Preserv-A-Chem)	Cetearyl Alcohol (and) PEG-150 Stearate (and) Steareth-20
Unichem METSAL (Universal Preserv-A-Chem)	Methyl Salicylate	Unicol CSA-2 (Universal Preserv-A-Chem)	Cetareth-2
Unichem MS (Universal Preserv-A-Chem)	Magnesium Stearate	Unicol CSA-5 (Universal Preserv-A-Chem)	Cetareth-5
Unichem PBA (Universal Preserv-A-Chem)	Lead Acetate	Unicol CSA-10 (Universal Preserv-A-Chem)	Cetareth-10
Unichem POCARB (Universal Preserv-A-Chem)	Potassium Carbonate	Unicol CSA-15 (Universal Preserv-A-Chem)	Cetareth-15
Unichem POCHLOR (Universal Preserv-A-Chem)	Potassium Chloride	Unicol CSA-20 (Universal Preserv-A-Chem)	Cetareth-20
Unichem POHYD (Universal Preserv-A-Chem)	Potassium Hydroxide	Unicol CSA-40 (Universal Preserv-A-Chem)	Cetareth-40
Unichem RSC (Universal Preserv-A-Chem)	Resorcinol	Unicol LA-4 (Universal Preserv-A-Chem)	Laureth-4
Unichem SALAC (Universal Preserv-A-Chem)	Salicylic Acid	Unicol LA-9 (Universal Preserv-A-Chem)	Laureth-9
Unichem SOHYD (Universal Preserv-A-Chem)	Sodium Hydroxide	Unicol LA-12 (Universal Preserv-A-Chem)	Disodium Lauroamphodipropionate
		Unicol LA-23 (Universal Preserv-A-Chem)	Laureth-23
		Unicol NP-2 (Universal Preserv-A-Chem)	Nonoxynol-2

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REPLY TO FINAL OFFICE ACTION  
Application Serial No. 10/046,568  
Attorney Docket No. 05725.1018-00000

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:	)	
	)	
Xavier BLIN et al.	)	Group Art Unit: 1615
	)	
Application No.: 10/046,568	)	Examiner: Jyothsna A. VENKAT
	)	
Filed: January 16, 2002	)	
	)	
For: NAIL POLISH COMPOSITION	)	Confirmation No.: 1780
COMPRISING A POLYMER	)	

**EXHIBIT C**

Copy of Certified Translation of U.S. Provisional Application No. 60/330,767  
(Corresponds to French Application No. 01 00623)



UNITED STATES PATENT AND TRADEMARK OFFICE

I, Susan ANTHONY BA, ACIS,

Director of RWS Group Ltd, of Europa House, Marsham Way, Gerrards Cross,  
Buckinghamshire, England declare;

1. That I am a citizen of the United Kingdom of Great Britain and Northern Ireland.
2. That the translator responsible for the attached translation is well acquainted with the French and English languages.
3. That the attached is, to the best of RWS Group Ltd knowledge and belief, a true translation into the English language of the specification in French filed with the application for a patent in the U.S.A. on October 30, 2001  
under the number 60/330,767
4. That I believe that all statements made herein of my own knowledge are true and that all statements made on information and belief are true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the patent application in the United States of America or any patent issuing thereon.

For and on behalf of RWS Group Ltd

The 21st day of October 2004



The present invention relates to a composition for caring for and/or treating and/or making up the nails of human beings, comprising a liquid organic phase including a volatile organic solvent, structured by a specific polymer. This composition is provided in particular in the form of a nail polish stick.

The makeup composition can also be applied to makeup accessories (support), such as false nails.

10 In nail polishes comprising an organic solvent medium, it is standard practice to thicken the organic phase with thickening agents.

The term "liquid organic phase" is understood to mean, within the meaning of the invention, an organic phase which is liquid at ambient temperature (25°C) and which is composed of one or more organic compounds which are liquid at ambient temperature, also known as organic solvents or oils, generally compatible with one another. Thickened compositions make it possible to make it easier to take the product from its container without significant loss, to distribute the polish over the surface of the nail or alternatively to be able to use the polish in sufficient amounts to obtained the desired cosmetic effect. Furthermore, the thickening agent makes it possible to prevent the sedimentation during storage of the pigments often present in nail polishes.

15  
20  
25

The use is known, for thickening the

compositions, of clays such as organomodified  
montmorillonites, such as disclosed in Application  
GB-A-2021411. In point of fact, clays opacify the  
composition and do not make possible the preparation of  
5 a translucent composition. Furthermore, clays are often  
formulated with an agent which promotes their swelling,  
such as citric acid or orthophosphoric acid, which can  
lead to instability of the composition.

Furthermore, nail polishes known to date are  
10 generally provided in the form of a fluid composition  
which is applied using a brush or alternatively a pen  
(see in particular US-A-4 712 571).

The need thus remains for a composition which  
does not exhibit the above disadvantages. Furthermore,  
15 it is desirable to be able to have available a novel  
nail polish pharmaceutical dosage form different from  
the nail polishes known to date.

A subject matter of the invention is  
specifically a composition for caring for and/or making  
20 up and/or treating the nails which makes it possible to  
overcome the abovementioned disadvantages.

The applicant has found, surprisingly, that  
the use of specific polymers in combination with one or  
more volatile organic solvents makes it possible to  
25 obtain structured nail polishes, in particular a gel  
and more particularly a stick, the application of which  
to the nails results in a film having good cosmetic  
properties.

The invention applies not only to products for making up the nails but also to products for caring for and/or treating the nails.

More specifically, a subject matter of the invention is a structured nail polish composition comprising at least one liquid organic phase comprising at least one volatile organic solvent, the liquid organic phase being structured by at least one first polymer with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having hydrocarbonaceous repeat units which are provided with at least one heteroatom and b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these hydrocarbonaceous units.

Another subject matter of the invention is a stick nail polish composition comprising an organic phase comprising a volatile organic solvent and a first polymer with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having hydrocarbonaceous repeat units which are provided with at least one heteroatom and b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these hydrocarbonaceous units.

A further subject matter of the invention is a cosmetic process for caring for, making up or treating the nails, comprising the application, to the



nails, of the composition, in particular cosmetic composition, as defined above.

Another subject matter of the invention is the use in a nail polish composition, for producing a  
5 stick, of a liquid organic phase comprising at least one volatile organic solvent and of a sufficient amount of a first polymer with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having hydrocarbonaceous repeat units  
10 which are provided with at least one heteroatom and b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these hydrocarbonaceous units.

The nail polish composition of the invention  
15 can be provided in the form of a paste, solid, gel, cream or thickened liquid. It can be an oil-in-water or water-in-oil emulsion or a stiff or soft anhydrous gel. In particular, it is provided in the form cast as a stick or as a dish and more especially in the form of a  
20 stiff anhydrous gel, in particular an anhydrous stick. More especially, it is provided in the form of a stiff gel which can be translucent or transparent, the liquid organic phase forming the continuous phase.

The gelling of the solvent phase can be  
25 adjusted according to the nature of the heteroatom-comprising polymer used and can be such that a stiff structure in the form of a tube or stick is obtained.

The structuring polymer of the composition of

the invention is a solid which is nondeformable at ambient temperature (25°C).

The term "functionalized chains" is understood to mean, within the meaning of the invention, an alkyl chain comprising one or more functional or reactive groups chosen in particular from amide, hydroxyl, ether, oxyalkylene or polyoxyalkylene, halogen, ester, siloxane or polysiloxane groups, the halogen groups including fluorinated or perfluorinated groups. In addition, the hydrogen atoms of one or more fatty chains can be at least partially substituted by fluorine atoms.

According to the invention, these chains can be bonded directly to the polymer backbone or can be bonded via an ester functional group or a perfluorinated group.

The term "polymer" is understood to mean, within the meaning of the invention, a compound having at least 2 repeat units and preferably at least 3 repeat units which are identical.

The term "hydrocarbonaceous repeat units" is understood to mean, within the meaning of the invention, a unit comprising from 2 to 80 carbon atoms and preferably from 2 to 60 carbon atoms, carrying hydrogen atoms and optionally oxygen atoms, which can be linear, branched or cyclic and saturated or unsaturated. In addition, these units each comprise from one to several heteroatoms which are

advantageously nonpendent heteroatoms and which are found in the polymer backbone. These heteroatoms are chosen from nitrogen, sulfur or phosphorus atoms and their combinations, optionally in combination with one  
5 or more oxygen atoms. Preferably, the units comprise at least one nitrogen atom, in particular one nonpendent nitrogen atom. Advantageously, these units additionally comprise a carbonyl group.

The heteroatom-comprising units are in  
10 particular amide units, forming a backbone of the polyamide type, or carbamate and/or urea units, forming a polyurethane, polyurea and/or polyurea/urethane backbone. These units are preferably amide units. Advantageously, the pendent chains are bonded directly  
15 to at least one of the heteroatoms of the polymer backbone. According to one embodiment, the first polymer comprises a polyamide backbone.

The first polymer can comprise, between the hydrocarbonaceous units, silicone units or  
20 oxyalkylenated units.

In addition, the first polymer of the composition of the invention advantageously comprises a total number of fatty chains which represents from 40 to 98% of the total number of the heteroatom-comprising  
25 units and of the fatty chains and better still from 50 to 95%. The nature and the proportion of the heteroatom-comprising units depends on the nature of the organic phase and is in particular similar to the

polar nature of the organic phase. Thus, the greater the polarity of the heteroatom-comprising units and the greater their proportion in the first polymer, which corresponds to the presence of several heteroatoms, the greater the affinity of the first polymer for polar oils. On the other hand, the lower the polarity of the heteroatom-comprising units, indeed even when they are nonpolar, or the lower their proportion, the greater the affinity of the first polymer for nonpolar oils.

10           The first polymer is advantageously a polyamide. Consequently, another subject matter of the invention is a structured nail polish composition comprising at least one liquid organic phase comprising at least one volatile organic solvent, the liquid organic phase being structured by at least one polyamide with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having amide repeat units and b), optionally, optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these amide units.

Another subject matter of the invention is a stick nail polish composition comprising a volatile organic solvent and a first polyamide polymer with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having amide repeat units and b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon

atoms and which are bonded to these amide units.

Preferably, the pendent fatty chains are bonded to at least one of the nitrogen atoms of the amide units of the first polymer.

5 In particular, the fatty chains of this polyamide represent from 40 to 98% of the total number of the amide units and of the fatty chains and better still from 50 to 95%.

Advantageously, the first polymer and in  
10 particular the polyamide of the composition according to the invention exhibits a weight-average molecular mass of less than or equal to 100 000 (ranging in particular from 1 000 to 100 000), especially of less than 50 000 (ranging in particular from 1 000 to  
15 50 000) and more especially ranging from 1 000 to 30 000, preferably from 2 000 to 20 000 and better still from 2 000 to 10 000.

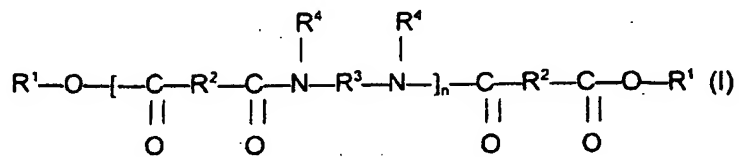
Mention may be made, as preferred first polymers which can be used in the invention, of  
20 polyamides branched by pendent fatty chains and/or end fatty chains having from 6 to 120 carbon atoms and better still from 8 to 120 and in particular from 12 to 68 carbon atoms, each end fatty chain being bonded to the polyamide backbone via at least one bonding group,  
25 in particular an ester group. Preferably, these polymers comprise a fatty chain at each end of the polymer backbone and in particular of the polyamide backbone. Mention may be made, as other bonding group,

of ether, amine, urea, urethane, thioether, thioester, thiourea or thiourethane groups.

These first polymers are preferably polymers resulting from a polycondensation between a

5 dicarboxylic acid having at least 32 carbon atoms (having in particular from 32 to 44 carbon atoms) with a diamine having at least 2 carbon atoms (in particular from 2 to 36 carbon atoms). The diacid is preferably a dimer resulting from a fatty acid comprising ethylenic  
10 unsaturation having at least 16 carbon atoms, preferably from 16 to 24 carbon atoms, such as oleic acid, linoleic acid or linolenic acid. The diamine is preferably ethylenediamine, hexylenediamine or hexamethylenediamine. For polymers comprising one or 2  
15 end carboxylic acid groups, it is advantageous to esterify them with a monoalcohol having at least 4 carbon atoms, preferably from 10 to 36 carbon atoms and better still from 12 to 24 and even better still from 16 to 24, for example 18 carbon atoms.

20 These polymers are more especially those disclosed in the document US-A-5 783 657 of Union Camp. Each of these polymers satisfies in particular the following formula (I):



in which  $n$  denotes a whole number of amide units such that the number of ester groups represents from 10% to 50% of the total number of the ester and amide groups; 5  $R^1$  is, in each case, independently an alkyl or alkenyl group having at least 4 carbon atoms and in particular from 4 to 24 carbon atoms;  $R^2$  independently represents, in each case, a  $C_4$  to  $C_{42}$  hydrocarbonaceous group, provided that 50% of the  $R^2$  groups represent a  $C_{30}$  to  $C_{42}$  10 hydrocarbonaceous group;  $R^3$  independently represents, in each case, an organic group provided with at least 2 carbon atoms, with hydrogen atoms and optionally with one or more oxygen or nitrogen atoms; and  $R^4$  independently represents, in each case, a hydrogen 15 atom, a  $C_1$  to  $C_{10}$  alkyl group or a direct bond to  $R^3$  or to another  $R^4$ , so that the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined by  $R^4-N-R^3$ , with at least 50% of the  $R^4$  groups representing a hydrogen atom.

20 In the specific case of the formula (I), the optionally functionalized end fatty chains within the meaning of the invention are end chains bonded to the final heteroatom, in this instance nitrogen, of the polyamide backbone.

25 In particular, the ester groups of the formula (I), which form part of the end and/or pendent fatty chains within the meaning of the invention, represent from 15 to 40% of the total number of the

ester and amide groups and better still from 20 to 35%. Furthermore,  $n$  advantageously represents an integer ranging from 1 to 5 and better still of greater than 2, in particular ranging from 3 to 5. Preferably,  $R^1$  is a C<sub>12</sub> to C<sub>22</sub> alkyl group and preferably a C<sub>16</sub> to C<sub>22</sub> alkyl group. Advantageously,  $R^2$  can be a C<sub>10</sub> to C<sub>42</sub> hydrocarbonaceous (alkylene) group. Preferably, at least 50% and better still at least 75% of the  $R^2$  groups are groups having from 30 to 42 carbon atoms. The other  $R^2$  groups are C<sub>4</sub> to C<sub>19</sub> and even C<sub>4</sub> to C<sub>12</sub> hydrogenated groups. Preferably,  $R^3$  represents a C<sub>2</sub> to C<sub>36</sub> hydrocarbonaceous group or a polyoxyalkylenated group and  $R^4$  represents a hydrogen atom. Preferably,  $R^3$  represents a C<sub>2</sub> to C<sub>12</sub> hydrocarbonaceous group.

The hydrocarbonaceous groups can be linear, cyclic or branched and saturated or unsaturated groups. Furthermore, the alkyl and alkylene groups can be linear or branched and saturated or unsaturated groups.

The polymers of formula (I) are generally provided in the form of blends of polymers, it being possible for these blends to additionally comprise a synthetic product corresponding to a compound of formula (I) where  $n$  has the value 0, that is to say a diester.

Mention may be made, as examples of first polymers according to the invention, of the commercial products sold by Arizona Chemical under the names Uniclear<sup>®</sup> 80 and Uniclear<sup>®</sup> 100. They are sold



respectively in the form of an 80% (as active material) gel in a mineral oil and of a 100% (as active material) gel. They have a softening point of 88 to 94°C. These commercial products are a blend of copolymers of a C<sub>36</sub> diacid condensed with ethylenediamine, with a weight-average molecular mass of approximately 6 000. The end ester groups result from esterification of the remaining acid endings with cetyl alcohol, stearyl alcohol or their mixtures (also known as cetearyl alcohol).

Mention may also be made, as first polymer which can be used in the invention, of polyamide resins resulting from the condensation of an aliphatic dicarboxylic acid and of a diamine (including compounds having more than 2 carbonyl groups and 2 amine groups), the carbonyl and amine groups of adjacent individual units being condensed via an amide bond. These polyamides are in particular those sold under the Versamid® trademark by General Mills Inc. and Henkel Corp. (Versamid® 930, 744 or 1655) or by Olin Mathieson Chemical Corp. under the Onamid® trademark, in particular Onamid® S or C. These resins have a weight-average molecular mass ranging from 6 000 to 9 000. For further information on these polyamides, reference may be made to the documents US-A-3 645 705 and US-A-3 148 125. More especially, Versamid® 930 or 744 is used.

It is also possible to use the polyamides

sold by Arizona Chemical under the Uni-Rez<sup>®</sup> references (2658, 2931, 2970, 2621, 2613, 2624, 2665, 1554, 2623, 2662) and the product sold under the reference Macromelt 6212 by Henkel. For further information on  
5 these polyamides, reference may be made to the document US-A-5 500 209.

It is also possible to use polyamide resins resulting from vegetables, such as those disclosed in Patents US-A-5 783 657 and US-A-5 998 570, the contents  
10 of which are incorporated by way of reference in the present application.

The first polymer present in the composition according to the invention advantageously has a softening temperature of greater than 65°C and which  
15 can range up to 190°C. Preferably, it exhibits a softening temperature ranging from 70 to 130°C and better still from 80 to 105°C. The first polymer is in particular a nonwaxy polymer.

The first polymer according to the invention  
20 preferably corresponds to the formula (I) mentioned above. This first polymer exhibits, because of their fatty chain(s), good solubility in oils and thus results in macroscopically homogeneous compositions, even with a high level (at least 25%) of polymer, in  
25 contrast to polymers devoid of a fatty chain.

The first polymer can be present in the composition according to the invention in a content ranging from 0.1% to 60% by weight with respect to the

total weight of the composition, preferably ranging from 0.5% to 30% by weight and better still ranging from 1% to 20% by weight.

The liquid organic phase of the composition  
5 according to the invention additionally comprises at least one volatile organic solvent, namely one or more volatile solvents.

The term "volatile organic solvent" is understood to mean, within the meaning of the  
10 invention, any nonaqueous medium capable of evaporating on contact with the skin or nails in less than one hour at ambient temperature and atmospheric pressure. The volatile solvent or solvents of the invention are organic solvents and in particular volatile cosmetic  
15 oils which are liquid at ambient temperature and which have a nonzero vapour pressure, at ambient temperature and atmospheric pressure, ranging in particular from  $10^{-3}$  to 300 mm of Hg (0.013 Pa to 40 000 Pa) and preferably of greater than 0.1 mm of Hg (10 Pa) and  
20 better still of greater than 0.3 mm of Hg (30 Pa).

According to the invention, these volatile solvents in particular facilitate the application of the composition to the nails. These solvents can be hydrocarbonaceous solvents, silicone solvents  
25 optionally comprising pendent alkyl or alkoxy groups or alkyl or alkoxy groups at the end of the silicone chain, or a mixture of these solvents. Preferably, these solvents are not alcohols comprising at least 7

carbon atoms.

Advantageously, the liquid organic phase of the composition comprises at least one volatile organic solvent or a mixture of volatile organic solvents  
5 (within the meaning of the final mixture) exhibiting mean Hansen solubility parameters  $dD$ ,  $dP$  and  $dH$  at  $25^{\circ}\text{C}$  which satisfy the following conditions:

$$15 \leq dD \leq 19$$

$$dP \leq 10$$

10  $dH \leq 10$

Consequently, a subject matter of the invention is a cosmetic composition comprising an organic phase, a first polymer and a second additional film-forming polymer, the organic phase comprising at  
15 least one volatile organic solvent or a mixture of volatile organic solvents exhibiting mean Hansen solubility parameters  $dD$ ,  $dP$  and  $dH$  at  $25^{\circ}\text{C}$  which satisfy the conditions defined above.

Another subject matter of the invention is a  
20 nail polish composition comprising an organic phase, a first polymer and a second additional film-forming polymer, the organic phase comprising at least one volatile organic solvent or a mixture of volatile organic solvents exhibiting mean Hansen solubility  
25 parameters  $dD$ ,  $dP$  and  $dH$  at  $25^{\circ}\text{C}$  which satisfy the conditions defined above.

The definition of the solvents in the three-dimensional solubility space according to Hansen is

described in the article by C.M. Hansen: "The three-dimensional solubility parameters", J. Paint Technol., 39, 105 (1967):

- dD characterizes the London dispersion forces
- 5 resulting from the formation of dipoles induced during molecular impacts;
- dP characterizes the forces of Debye interaction between permanent dipoles and the forces of Keesom interactions between induced dipoles and permanent
- 10 dipoles;
- dH characterizes the forces of specific interactions (hydrogen bond, acid/base or donor/acceptor type and the like).

The parameters dD, dP and dH are expressed in  $(\text{J}/\text{cm}^3)^{1/2}$ .

- 15 Use is preferably made of an organic solvent such that  $dP \leq 5$ ;  $dH \leq 9$ .

Advantageously, dD, dP and dH obey the relationship

$$20 \quad \sqrt{4(17 - dD)^2 + dP^2 + dH^2} < L$$

L being equal to  $10 (\text{J}/\text{cm}^3)^{1/2}$  and better still  $9 (\text{J}/\text{cm}^3)^{1/2}$ .

- Mention may be made, as volatile organic solvent which can be used in the invention, of volatile
- 25 hydrocarbonaceous oils having from 4 to 16 carbon atoms and their mixtures and in particular linear  $\text{C}_6$ - $\text{C}_{10}$  alkanes, such as n-hexane, n-heptane or n-octane,

branched C<sub>8</sub>-C<sub>16</sub> alkanes, such as C<sub>8</sub>-C<sub>16</sub> isoalkanes (also known as isoparaffins), isododecane, isodecane, isohexadecane and, for example, the oils sold under the tradenames of Isopars or Permetyls, esters having from  
5 4 to 8 carbon atoms, such as ethyl acetate, n-propyl acetate, isobutyl acetate or n-butyl acetate, branched C<sub>8</sub>-C<sub>16</sub> esters, such as isohexyl neopentanoate, and their mixtures. Preferably, the volatile organic solvent is chosen from volatile hydrocarbonaceous oils having from  
10 4 to 10 carbon atoms and their mixtures.

Mention may be made, as other volatile organic solvent which can be used in the invention, of linear or cyclic silicone oils having a viscosity at ambient temperature of less than 8 centistokes  
15 ( $8 \cdot 10^{-6}$  m<sup>2</sup>/s) and having in particular from 2 to 7 silicon atoms, these silicones optionally comprising alkyl or alkoxy groups having from 1 to 10 carbon atoms. Mention may in particular be made, as volatile silicone oil which can be used in the invention, of  
20 octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane, dodecamethylcyclohexasiloxane, heptamethylhexyltrisiloxane, heptamethyloctyltrisiloxane, hexamethyldisiloxane, octamethyltrisiloxane, decamethyltetrasiloxane, dodecamethylpentasiloxane and  
25 their mixtures.

Use may also be made of volatile fluorinated solvents.

Use is preferably made of a volatile organic

solvent chosen from ethyl acetate, n-propyl acetate, isobutyl acetate, n-butyl acetate, heptane and their mixtures.

The volatile organic solvent can be present  
5 in the composition according to the invention in a content ranging from 20% to 98% by weight with respect to the total weight of the composition, preferably from 30% to 90% by weight and better still from 40% to 85% by weight.

10 The organic phase of the composition according to the invention can additionally comprise a nonvolatile oil which can be a polar oil or a nonpolar oil. The nonvolatile oil can be present in a content ranging from 0.01% to 10% by weight with respect to the  
15 total weight of the composition.

In particular, the polar oils can be chosen from:

- hydrocarbonaceous vegetable oils with a high content of triglycerides composed of esters of fatty acids and  
20 of glycerol, the fatty acids of which can have various  $C_4$  to  $C_{24}$  chain lengths, it being possible for the chains to be linear or branched and saturated or unsaturated; these oils are in particular wheat germ, maize, sunflower, karite, castor, sweet almond,  
25 macadamia, apricot, soybean, cottonseed, alfalfa, poppy, pumpkinseed, sesame, cucumber, rapeseed, avocado, hazelnut, grape seed, blackcurrant seed, evening primrose, millet, barley, quinoa, olive, rye,

- safflower, candlenut, passionflower or musk rose oils;  
 or triglycerides of caprylic/capric acids, such as  
 those sold by Stearineries Dubois or those sold under  
 the names Miglyol 810, 812 and 818 by Dynamit Nobel;
- 5 - synthetic oils or synthetic esters of formula  $R_5COOR_6$   
 in which  $R_5$  represents the residue of a linear or  
 branched fatty acid comprising from 1 to 40 carbon  
 atoms and  $R_6$  represents a hydrocarbonaceous chain, in  
 particular a branched hydrocarbonaceous chain,  
 10 comprising from 1 to 40 carbon atoms, provided that  
 $R_5 + R_6$  is  $\geq 10$ , such as, for example, purcellin oil  
 (cetearyl octanoate), isononyl isononanoate,  $C_{12}$  to  $C_{15}$   
 alkyl benzoate, isopropyl myristate, 2-ethylhexyl  
 palmitate, isostearate isostearate, or octanoates,  
 15 decanoates or ricinoleates of alcohols or polyalcohols;  
 hydroxylated esters, such as isostearyl lactate or  
 diisostearyl malate; and pentaerythritol esters;  
 - synthetic ethers having from 10 to 40 carbon atoms;  
 -  $C_8$  to  $C_{26}$  fatty alcohols, such as oleyl alcohol;  
 20 - their mixtures.

The nonpolar oils according to the invention  
 are in particular silicone oils, such as linear or  
 cyclic polydimethylsiloxanes (PDMSs) which are liquid  
 25 at ambient temperature; polydimethylsiloxanes  
 comprising pendent alkyl, alkoxy or phenyl groups  
 and/or alkyl, alkoxy or phenyl groups at the end of the  
 silicone chain, which groups have from 2 to 24 carbon



atoms; phenylated silicones, such as phenyl-  
trimethicones, phenyl dimethicones,  
phenyltrimethylsiloxydiphenyl-siloxanes, diphenyl  
dimethicones, diphenylmethyl-diphenyltrisiloxanes or  
5 (2-phenylethyl)trimethyl-siloxysilicates; linear or  
branched hydrocarbons of synthetic or mineral origin,  
such as liquid paraffins and its derivatives,  
petrolatum, liquid lanolin, polydecenes, hydrogenated  
polyisobutene, such as parleam, or squalane; and their  
10 mixtures.

Preferably, the oils are nonpolar oils and  
more especially an oil or a mixture of oils of the  
hydrocarbonaceous type of mineral or synthetic origin  
chosen in particular from hydrocarbons, especially  
15 alkanes, such as parleam oil, isoparaffins, such as  
isododecane and squalane, and their mixtures.  
Advantageously, these oils are used in combination with  
one or more phenylated silicone oils.

Preferably, use is made of a nonvolatile oil  
20 such that the mixture of volatile organic solvent and  
of nonvolatile oil exhibits mean Hansen solubility  
parameters  $dD$ ,  $dP$  and  $dH$  at  $25^{\circ}\text{C}$  which satisfy the  
conditions defined above.

According to a specific form of the  
25 invention, for a liquid organic phase structured by a  
polymer comprising a partially silicone-comprising  
backbone, this organic phase preferably comprises more  
than 40% of the total weight of the liquid organic

phase and better still from 50 to 100% of silicone-comprising volatile organic solvent or of silicone-comprising nonvolatile oils with respect to the total weight of the liquid organic phase.

5           According to another specific form of the invention, for a liquid organic phase structured by a nonpolar polymer of the hydrocarbonaceous type, this organic phase advantageously comprises more than 40% by weight and better still from 50 to 100% of hydro-  
10 carbonaceous volatile organic solvent or of hydrocarbonaceous nonpolar nonvolatile oil with respect to the total weight of the liquid organic phase.

          The total liquid organic phase represents, in practice, from 5 to 99% of the total weight of the  
15 composition, preferably from 20 to 75%.

          According to the invention, the composition can be a stick having a hardness ranging from 30 to 300 g and better still from 30 to 250 g, in particular from 30 to 150 g, preferably from 30 to 120 g and, for  
20 example, from 30 to 50 g. The hardness of the composition according to the invention can be measured by the "cheesewire" method, which consists in cutting a stick of lipstick with a diameter of 12.7 mm and in measuring the hardness at 20°C by means of a DFGHS 2  
25 dynamometer from Indelco-Chatillon moving at a rate of 100 mm/minute. It is expressed as the shear force (expressed in grams) needed to cut a stick under these conditions.

The hardness of the composition can also be measured by the method of penetration of a probe into said composition and in particular using a texture analyzer (for example TA-XT2i from Rhéo) equipped with  
5 an ebonite cylinder with a height of 25 mm and a diameter of 8 mm. The hardness measurement is carried out at 20°C at the center of five samples of said composition. The cylinder is introduced into each composition sample at a prerate of 2 mm/s, then at a  
10 rate of 0.5 mm/s and, finally, at a postrate of 2 mm/s, the total displacement being 1 mm. The value recorded of the hardness is that of the maximum peak. The measurement error is +/- 50 g. According to this method, the hardness of the composition stick can range  
15 from 20 to 2 000 g, in particular from 20 to 1 500 g and better still from 20 to 900 g, for example from 50 to 600 g or even better still from 150 to 450 g.

The hardness of the composition according to the invention is such that the composition is  
20 advantageously self-supporting and can easily disintegrate to form a satisfactory layer on the nails. In addition, with this hardness, the composition of the invention possesses good impact strength.

The hardness of the composition according to  
25 the invention is such that the composition is self-supporting and can easily disintegrate to form a satisfactory layer on the nails. In addition, with this hardness, the composition of the invention possesses

good impact strength.

Advantageously, the composition of the invention additionally comprises at least one subsidiary film-forming polymer other than said first  
5 polymer as described above.

The film-forming polymer can be chosen from cellulose polymers, such as nitrocellulose, cellulose acetate, cellulose acetate butyrate, cellulose acetate propionate or ethyl cellulose, or alternatively  
10 polyurethanes, acrylic polymers, vinyl polymers, polyvinylbutyrals, alkyd resins, resins resulting from aldehyde condensation products, such as aryl-sulfonamide-formaldehyde resins, for example toluene-sulfonamide-formaldehyde resin, or arylsulfonamide-  
15 epoxy resins.

Use may in particular be made, as film-forming polymer, of nitrocellulose RS 1/8 sec.; RS 1/4 sec.; 1/2 sec.; RS 5 sec.; RS 15 sec.; RS 35 sec.; RS 75 sec.; RS 150 sec.; AS 1/4 sec.; AS  
20 1/2 sec.; SS 1/4 sec.; SS 1/2 sec.; SS 5 sec.; sold in particular by Hercules; toluenesulfonamide-formaldehyde resin "Ketjentflex MS80" from Akzo or "Santolite MHP" or "Santolite MS 80" from Faconnier or "Resimpol 80" from Pan Americana, alkyd resin "Beckosol ODE 230-70-E"  
25 from Dainippon, acrylic resin "Acryloid B66" from Röhm & Haas, or polyurethane resin "Trixene PR 4127" from Baxenden.

The subsidiary film-forming polymer can be

present in the composition according to the invention in a content ranging from 0.1% to 60% by weight with respect to the total weight of the composition, preferably ranging from 2% to 40% by weight and better  
5 still from 5% to 25% by weight.

The composition of the invention can additionally comprise any additive conventionally used in the field under consideration chosen in particular from coloring materials, antioxidants, preservatives,  
10 fragrances, fillers, waxes, neutralizing agents, cosmetic or dermatological active principles, such as, for example, emollients, moisturizers or vitamins, spreading agents, sunscreens, and their mixtures. These additives can be present in the composition in a  
15 proportion of 0 to 20% (in particular of 0.01 to 20%) of the total weight of the composition and better still of 0.01 to 10%.

Of course, a person skilled in the art will take care to choose the optional additional additives  
20 and/or their amount so that the advantageous properties of the composition according to the invention are not, or not substantially, detrimentally affected by the envisaged addition.

Of course, the composition of the invention  
25 must be cosmetically or dermatologically acceptable, namely must comprise a nontoxic physiologically acceptable medium capable of being applied to the skin or superficial body growths of human beings. The term

"cosmetically acceptable" is understood to mean, within the meaning of the invention, a composition with a pleasant appearance, a pleasant smell and a pleasant feel.

5           The coloring material according to the invention can be chosen from lipophilic dyes, pigments and pearlescent agents commonly used in cosmetic or dermatological compositions, and their mixtures. This coloring material is generally present in a proportion  
10 of 0.01 to 10% of the total weight of the composition, preferably of 0.1 to 8%, if it is present.

          The fat-soluble dyes are, for example, Sudan red, DC Red 17, DC Green 6,  $\beta$ -carotene, soybean oil, Sudan brown, DC Yellow 11, DC Violet 2, DC Orange 5 or  
15 quinoline yellow. They can represent from 0.1 to 10% of the weight of the compositions and better still from 0.1 to 6%.

          The pigments can be white or colored, inorganic and/or organic and coated or uncoated.  
20 Mention may be made, among inorganic pigments, of titanium dioxide, which is optionally surface treated, zirconium or cerium oxides and iron or chromium oxides, manganese violet, ultramarine blue, chromium hydrate and ferric blue. Mention may be made, among organic  
25 pigments, of carbon black, pigments of D & C type and lakes based on cochineal carmine or on barium, strontium, calcium or aluminum. The pigments can represent from 0.1 to 50% and better still from 2 to

30% of the total weight of the composition, if they are present.

The pearlescent pigments can be chosen from white pearlescent pigments, such as mica covered with titanium oxide or with bismuth oxychloride, colored pearlescent pigments, such as titanium oxide-coated mica with iron oxides, titanium oxide-coated mica with in particular ferric blue or chromium oxide, or titanium oxide-coated mica with an organic pigment of the abovementioned type, and pearlescent pigments based on bismuth oxychloride. They can represent from 0.1 to 20% of the total weight of the composition and better still from 0.1 to 15%, if they are present.

The composition according to the invention can be manufactured by known processes used generally in the cosmetics or dermatological field.

The invention is illustrated in more detail in the following example. The percentages are given by weight.

**Example 1:**

A nail polish having the following composition was prepared:

- Resin formed from polyamide with end ester groups, sold under the name "Uniclear® 100" by Arizona Chemical 20 g
- Nitrocellulose 8 g
- Pigments 1 g
- Butyl acetate q.s. for 100 g

5

The nail polish is provided in the form of a structured solid composition, such as a stick.



CLAIMS

1. A structured nail polish composition comprising at least one liquid organic phase comprising at least one volatile organic solvent, the liquid  
5 organic phase being structured by at least one first polymer with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having hydrocarbonaceous repeat units which are provided with at least one heteroatom and  
10 b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these hydrocarbonaceous units.

2. A stick nail polish composition comprising a liquid organic phase comprising a volatile  
15 organic solvent and a first polymer with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having hydrocarbonaceous repeat units which are provided with at least one heteroatom and b) optionally  
20 functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these hydrocarbonaceous units.

3. A cosmetic composition comprising an organic phase, a first polymer and a second additional  
25 film-forming polymer, the organic phase comprising at least one volatile organic solvent or a mixture of volatile organic solvents exhibiting mean Hansen solubility parameters  $dD$ ,  $dP$  and  $dH$  at 25°C which

satisfy the following conditions:

$$15 \text{ (J/cm}^3\text{)}^{1/2} \leq dD \leq 19 \text{ (J/cm}^3\text{)}^{1/2}$$

$$dP \leq 10 \text{ (J/cm}^3\text{)}^{1/2}$$

$$dH \leq 10 \text{ (J/cm}^3\text{)}^{1/2}$$

5

4. A nail polish composition comprising a liquid organic phase, a first polymer and a second additional film-forming polymer, the organic phase comprising at least one volatile organic solvent or a mixture of volatile organic solvents exhibiting mean Hansen solubility parameters  $dD$ ,  $dP$  and  $dH$  at 25°C which satisfy the following conditions:

$$15 \text{ (J/cm}^3\text{)}^{1/2} \leq dD \leq 19 \text{ (J/cm}^3\text{)}^{1/2}$$

$$dP \leq 10 \text{ (J/cm}^3\text{)}^{1/2}$$

15

$$dH \leq 10 \text{ (J/cm}^3\text{)}^{1/2}$$

5. The composition as claimed in any one of the preceding claims, wherein the average molar mass of the first polymer is less than 50 000.

6. The composition as claimed in any one of the preceding claims, wherein the heteroatom-comprising units of the first polymer comprise a nitrogen atom.

7. The composition as claimed in any one of the preceding claims, wherein the heteroatom-comprising units are amides.

25 8. The composition as claimed in any one of the preceding claims, wherein the fatty chains represent from 40 to 98% of the total number of the heteroatom-comprising units and of the fatty chains.

9. The composition as claimed in one of the preceding claims, wherein the fatty chains represent from 50 to 95% of the total number of the heteroatom-comprising units and of the fatty chains.

5           10. The composition as claimed in one of the preceding claims, wherein the pendent fatty chains are bonded directly to at least one of said heteroatoms.

          11. A structured nail polish composition comprising at least one liquid organic phase comprising  
10 at least one volatile organic solvent, the liquid organic phase being structured by at least one polyamide with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having amide repeat units and b), optionally,  
15 optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these amide units.

          12. A stick nail polish composition comprising a volatile organic solvent and a first  
20 polyamide polymer with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having amide repeat units and b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which  
25 are bonded to these amide units.

          13. A cosmetic composition comprising an organic phase, a first polyamide polymer with a weight-average molecular mass of less than or equal to 100 000

comprising a) a polymer backbone having amide repeat units and b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these amide units, and a second  
 5 additional film-forming polymer, the organic phase comprising at least one volatile organic solvent or a mixture of volatile organic solvents exhibiting mean Hansen solubility parameters  $dD$ ,  $dP$  and  $dH$  at 25°C which satisfy the following conditions:

$$10 \quad 15 \text{ (J/cm}^3\text{)}^{1/2} \leq dD \leq 19 \text{ (J/cm}^3\text{)}^{1/2}$$

$$dP \leq 10 \text{ (J/cm}^3\text{)}^{1/2}$$

$$dH \leq 10 \text{ (J/cm}^3\text{)}^{1/2}$$

14. A nail polish composition comprising an organic phase, a first polyamide polymer with a weight-  
 15 average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having amide repeat units and b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these amide units, and a second  
 20 additional film-forming polymer, the organic phase comprising at least one volatile organic solvent or a mixture of volatile organic solvents exhibiting mean Hansen solubility parameters  $dD$ ,  $dP$  and  $dH$  at 25°C which satisfy the following conditions:

$$25 \quad 15 \text{ (J/cm}^3\text{)}^{1/2} \leq dD \leq 19 \text{ (J/cm}^3\text{)}^{1/2}$$

$$dP \leq 10 \text{ (J/cm}^3\text{)}^{1/2}$$

$$dH \leq 10 \text{ (J/cm}^3\text{)}^{1/2}$$

15. The composition as claimed in one of

claims 11 to 14, wherein the fatty chains represent from 40 to 98% of the total number of the amide units and of the fatty chains.

16. The composition as claimed in one of  
5 claims 11 to 15, wherein the fatty chains represent from 50 to 95% of the total number of the amide units and of the fatty chains.

17. The composition as claimed in one of  
claims 11 to 16, wherein the pendent fatty chains are  
10 bonded directly to at least one of the nitrogen atoms of the amide units.

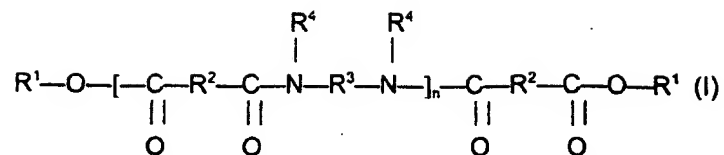
18. The composition as claimed in one of the preceding claims, wherein the weight-average molar mass of the first polymer ranges from 2 000 to 20 000 and  
15 better still from 2 000 to 10 000.

19. The composition as claimed in any one of the preceding claims, wherein the end fatty chains are bonded to the backbone via bonding groups.

20. The composition as claimed in claim 19,  
20 wherein the bonding groups are ester groups.

21. The composition as claimed in one of the preceding claims, wherein the fatty chains have from 12 to 68 carbon atoms.

22. The composition as claimed in one of the  
25 preceding claims, wherein the first polymer is chosen from the polymers of following formula (I) and their blends:



in which n denotes a number of amide units such that the number of ester groups represents from 10% to 50% of the total number of the ester and amide groups; R<sup>1</sup> is, in each case, independently an alkyl or alkenyl group having at least 4 carbon atoms; R<sup>2</sup> independently represents, in each case, a C<sub>4</sub> to C<sub>42</sub> hydrocarbonaceous group, provided that 50% of the R<sup>2</sup> groups represent a C<sub>30</sub> to C<sub>42</sub> hydrocarbonaceous group; R<sup>3</sup> independently represents, in each case, an organic group provided with at least 2 carbon atoms, with hydrogen atoms and optionally with one or more oxygen or nitrogen atoms; and R<sup>4</sup> independently represents, in each case, a hydrogen atom, a C<sub>1</sub> to C<sub>10</sub> alkyl group or a direct bond to R<sup>3</sup> or to another R<sup>4</sup>, so that the nitrogen atom to which both R<sup>3</sup> and R<sup>4</sup> are bonded forms part of a heterocyclic structure defined by R<sup>4</sup>-N-R<sup>3</sup>, with at least 50% of the R<sup>4</sup> groups representing a hydrogen atom.

23. The composition as claimed in the preceding claim, wherein R<sup>1</sup> is a C<sub>12</sub> to C<sub>22</sub> alkyl group.

24. The composition as claimed in either of claims 22 and 23, wherein R<sup>2</sup> are groups having from 30 to 42 carbon atoms.

25. The composition as claimed in one of the

preceding claims, wherein the first polymer is present in a content ranging from 0.1% to 60% by weight with respect to the total weight of the composition, preferably ranging from 0.5% to 30% by weight and  
 5 better still ranging from 1% to 20% by weight.

26. The composition as claimed in one of claims 1, 2 and 5 to 25, wherein the volatile organic solvent is chosen from volatile organic solvents or mixtures of volatile organic solvents exhibiting mean  
 10 Hansen solubility parameters  $dD$ ,  $dP$  and  $dH$  at 25°C which satisfy the following conditions:

$$15 \quad (J/cm^3)^{1/2} \leq dD \leq 19 \quad (J/cm^3)^{1/2}$$

$$dP \leq 10 \quad (J/cm^3)^{1/2}$$

$$dH \leq 10 \quad (J/cm^3)^{1/2}$$

15 27. The composition as claimed in any one of claims 3 to 26, wherein  $dP \leq 5 \quad (J/cm^3)^{1/2}$ .

28. The composition as claimed in any one of claims 3 to 27, wherein  $dH \leq 9 \quad (J/cm^3)^{1/2}$ .

29. The composition as claimed in any one of  
 20 claims 3 to 28, wherein  $dD$ ,  $dP$  and  $dH$  obey the relationship

$$\sqrt{4(17 - dD)^2 + dP^2 + dH^2} < L$$

$L$  being equal to  $10 \quad (J/cm^3)^{1/2}$  and better still  
 25  $9 \quad (J/cm^3)^{1/2}$ .

30. The composition as claimed in any one of the preceding claims, wherein the volatile organic

solvent is chosen from the group formed by esters having from 4 to 8 carbon atoms and alkanes having from 6 to 10 carbon atoms.

31. The composition as claimed in any one of  
5 the preceding claims, wherein the volatile organic solvent is chosen from the group formed by ethyl acetate, n-propyl acetate, isobutyl acetate, n-butyl acetate and heptane.

32. The composition as claimed in any one of  
10 claims 1, 2, 5 to 12 and 15 to 25, wherein the volatile organic solvent is chosen from branched C<sub>8</sub>-C<sub>16</sub> alkanes, branched C<sub>8</sub>-C<sub>16</sub> esters and their mixtures.

33. The composition as claimed in any one of  
15 claims 1, 2, 5 to 12 and 15 to 25, wherein the volatile organic solvent is chosen from C<sub>8</sub>-C<sub>16</sub> isoparaffins, isododecane and their mixtures.

34. The composition as claimed in one of the preceding claims, wherein the volatile organic solvent is present in a content ranging from 20% to 98% by  
20 weight with respect to the total weight of the composition, preferably from 30% to 90% by weight and better still from 40% to 85% by weight.

35. The composition as claimed in any one of the preceding claims, wherein the liquid organic phase  
25 additionally comprises at least one nonvolatile oil.

36. The composition as claimed in one of the preceding claims, wherein the liquid organic phase represents from 5 to 99% of the total weight of the



composition, preferably from 20 to 75%.

37. The composition as claimed in any one of the preceding claims, which comprises a second film-forming polymer.

5           38. The composition as claimed in claim 37, wherein the second film-forming polymer is chosen from the group formed by cellulose polymers, polyurethanes, acrylic polymers, vinyl polymers, polyvinylbutyrals, alkyd resins, resins resulting from aldehyde  
10           condensation products, and arylsulfonamide-epoxy resins.

          39. The composition as claimed in claim 37 or 38, wherein the second film-forming polymer is present in a content ranging from 0.1% to 60% by weight  
15           with respect to the total weight of the composition, preferably ranging from 2% to 40% by weight and better still from 5% to 25% by weight.

          40. The composition as claimed in one of the preceding claims, which comprises at least one additive  
20           chosen from coloring materials, antioxidants, preservatives, fragrances, fillers, waxes, neutralizing agents, cosmetic or dermatological active principles, dispersing agents, spreading agents, sunscreens, and their mixtures.

25           41. The composition as claimed in one of the preceding claims, which is provided in the form of a stiff gel and in particular of an anhydrous stick.

          42. The composition as claimed in one of the

preceding claims, which is provided in the form of a stick with a hardness ranging from 30 to 300 g, measured by the "cheesewire" method.

43. A cosmetic process for making up or  
5 nontherapeutically treating the nails of human beings, comprising the application, to the nails, of the cosmetic composition in accordance with one of the preceding claims.

44. Use in a nail polish composition, for  
10 producing a stick having a hardness ranging from 30 to 300 g, measured by the "cheesewire" method, of a liquid organic phase comprising at least one volatile organic solvent and of a sufficient amount of a first polymer with a weight-average molecular mass of less than or  
15 equal to 100 000 comprising a) a polymer backbone having hydrocarbonaceous repeat units which are provided with at least one heteroatom and b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to  
20 these hydrocarbonaceous units.

45. Use as claimed in the preceding claim, wherein the polymer is a polyamide comprising end groups comprising an ester group comprising a hydrocarbonaceous chain having from 10 to 42 carbon atoms.

25 46. Use as claimed in claim 44 or 45, wherein the liquid organic phase comprises a volatile organic solvent or a mixture of volatile organic solvents exhibiting mean Hansen solubility parameters

dD, dP and dH at 25°C which satisfy the following conditions:

$$15 \text{ (J/cm}^3\text{)}^{1/2} \leq dD \leq 19 \text{ (J/cm}^3\text{)}^{1/2}$$

$$dP \leq 10 \text{ (J/cm}^3\text{)}^{1/2}$$

5  $dH \leq 10 \text{ (J/cm}^3\text{)}^{1/2}$

47. Use as claimed in one of claims 44 to 46, wherein the volatile organic solvent is chosen from the group formed by ethyl acetate, n-propyl acetate, isobutyl acetate, n-butyl acetate and heptane.

10 48. Use as claimed in one of claims 44 to 47, wherein the composition comprises a second film-forming polymer.

## ABSTRACT

### **Nail polish comprising a polymer**

The invention relates to a nail polish composition comprising at least one liquid organic phase comprising at least one volatile organic solvent, the liquid organic phase being structured by at least one polymer with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having hydrocarbonaceous repeat units which are provided with at least one heteroatom and optionally b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these units. This composition is provided in particular in the form of a nail polish stick.



REPLY TO FINAL OFFICE ACTION  
Application Serial No. 10/046,568  
Attorney Docket No. 05725.1018-00000

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:	)	
	)	
Xavier BLIN et al.	)	Group Art Unit: 1615
	)	
Application No.: 10/046,568	)	Examiner: Jyothsna A. VENKAT
	)	
Filed: January 16, 2002	)	
	)	
For: NAIL POLISH COMPOSITION	)	Confirmation No.: 1780
COMPRISING A POLYMER	)	

**EXHIBIT D**

Claims from Co-Pending Applications



PENDING CLAIMS  
Application No. 09/733,899  
Attorney Docket No. 05725.0594-00000  
Filed: December 12, 2000

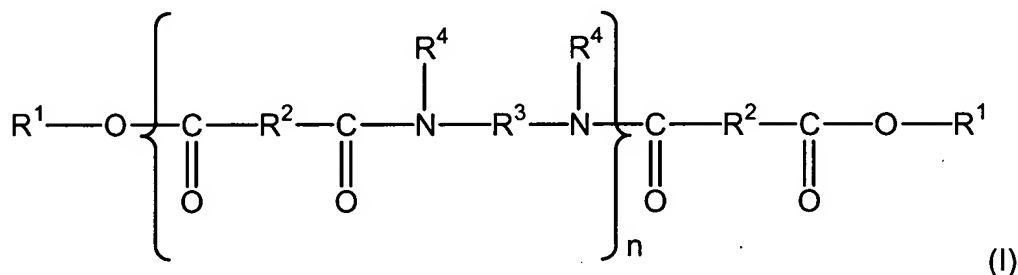
1.-244. (Cancelled)

245. (Previously presented) A cosmetic composition comprising:

at least one liquid fatty phase in said cosmetic composition which comprises:

(i) at least one structuring polymer chosen from polymers of formula (I)

below:



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

-  $R^1$ , which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

-  $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

-  $R^3$ , which are identical or different, are each chosen from  $C_2$  to  $C_{36}$  hydrocarbon-based groups; and

- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen and C<sub>1</sub> to C<sub>10</sub> alkyl groups, with the proviso that at least 50% of all R<sup>4</sup> are chosen from hydrogen;  
and

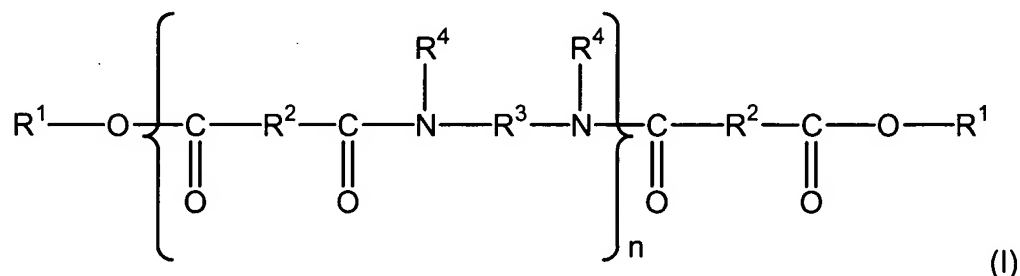
(ii) at least one film-forming silicone resin.

246. (Original) The composition according to claim 245, wherein said composition is a solid.

247. (Previously presented) A make-up and/or care and/or treatment composition for keratinous fibers comprising:

at least one liquid fatty phase in said composition which comprises:

(i) at least one structuring polymer chosen from polymers of formula (I) below:



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

-  $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$

hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

-  $R^3$ , which are identical or different, are each chosen from  $C_2$  to  $C_{36}$

hydrocarbon-based groups; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen and  $C_1$  to  $C_{10}$  alkyl groups, with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen; and

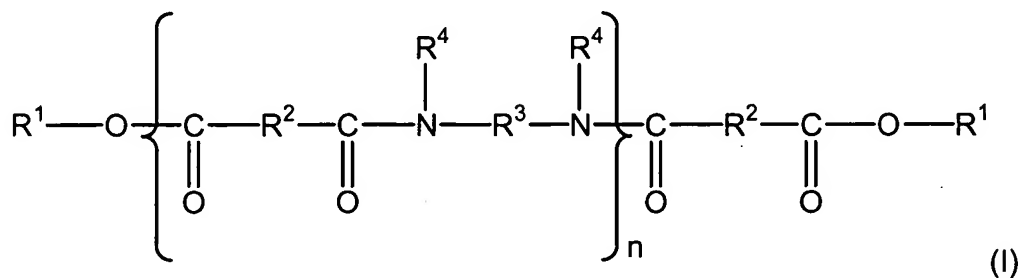
(ii) at least one film-forming silicone resin.

248.-252. (Cancelled)

253. (Previously presented) A method for care, make up, or treatment of a keratin material chosen from lips, skin, and keratinous fibers, comprising the application to said keratin material of a cosmetic composition comprising:

at least one liquid fatty phase which comprises:

(i) at least one structuring polymer chosen from polymers of formula (I) below:



in which:

-  $n$  is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from



10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- $R^1$ , which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

- $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

- $R^3$ , which are identical or different, are each chosen from  $C_2$  to  $C_{36}$  hydrocarbon-based groups; and

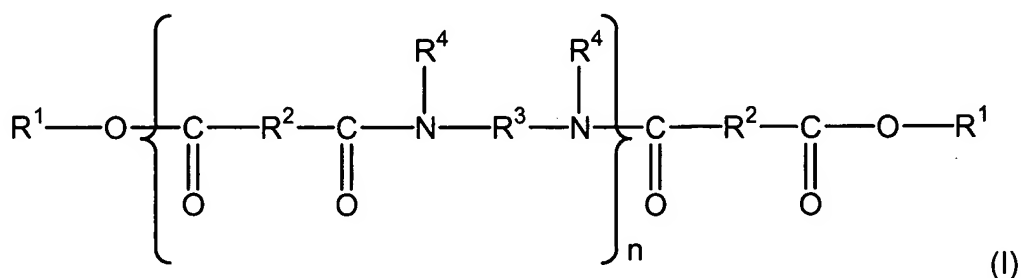
- $R^4$ , which are identical or different, are each chosen from hydrogen and  $C_1$  to  $C_{10}$  alkyl groups, with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen; and

(ii) at least one film-forming silicone resin.

254. (Previously presented) A method for making a cosmetic composition in the form of a physiologically acceptable composition comprising including in said composition

at least one liquid fatty phase which comprises:

(i) at least one structuring polymer chosen from polymers of formula (I) below:



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- R<sup>3</sup>, which are identical or different, are each chosen from C<sub>2</sub> to C<sub>36</sub> hydrocarbon-based groups; and

- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen and C<sub>1</sub> to C<sub>10</sub> alkyl groups, with the proviso that at least 50% of all R<sup>4</sup> are chosen from hydrogen; and

(ii) at least one film-forming silicone resin.

255.-267. (Cancelled)

268. (Previously Presented) The cosmetic composition according to claim 245, wherein said at least one liquid fatty phase of the composition comprises at least one oil.

269. (Previously Presented) The cosmetic composition according to claim 268, wherein said at least one oil is chosen from at least one polar oil and at least one apolar oil.

270. (Previously Presented) The cosmetic composition according to claim 269, wherein said at least one polar oil is chosen from:

- hydrocarbon-based plant oils with a high content of triglycerides comprising fatty acid esters of glycerol in which the fatty acids comprise chains having from 4 to 24 carbon atoms, said chains optionally being chosen from linear and branched, and saturated and unsaturated chains;

- synthetic oils or esters of formula  $R_5COOR_6$  in which  $R_5$  is chosen from linear and branched fatty acid residues comprising from 1 to 40 carbon atoms and  $R_5 + R_6 \geq 10$ ;

- synthetic ethers containing from 10 to 40 carbon atoms;

- $C_8$  to  $C_{26}$  fatty alcohols; and

- $C_8$  to  $C_{26}$  fatty acids.

271. (Previously Presented) The cosmetic composition according to claim 269, wherein said at least one apolar oil is chosen from:

- silicone oils chosen from volatile and non-volatile, linear and cyclic polydimethylsiloxanes that are liquid at room temperature;

- polydimethylsiloxanes comprising alkyl or alkoxy groups which are pendant and/or at the end of the silicone chain, the groups each containing from 2 to 24 carbon atoms;

- phenylsilicones; and

- hydrocarbons chosen from linear and branched, volatile and non-volatile hydrocarbons of synthetic and mineral origin.

272. (Previously Presented) The cosmetic composition according to claim 245, wherein said at least one liquid fatty phase comprises at least one non-volatile oil.

273. (Previously Presented) The cosmetic composition according to claim 272, wherein said at least one non-volatile oil is chosen from hydrocarbon-based oils of mineral, plant and synthetic origin, synthetic esters and ethers, and silicone oils.

274. (Previously Presented) The cosmetic composition according to claim 245, wherein said at least one liquid fatty phase comprises at least one volatile solvent chosen from hydrocarbon-based solvents and silicone solvents optionally comprising alkyl or alkoxy groups that are pendant or at the end of a silicone chain.

275. (Previously Presented) The cosmetic composition according to claim 245, wherein said composition further comprises at least one additional fatty material.

276. (Previously Presented) The cosmetic composition according to claim 275, wherein said at least one additional fatty material is chosen from gums, fatty materials pasty at ambient temperature, and resins.

277. (Previously Presented) The cosmetic composition according to claim 245, wherein said at least one film-forming silicone resin is chosen from silsesquioxanes and siloxysilicates.

278. (Previously Presented) The cosmetic composition according to claim 277, wherein said silsesquioxanes comprise repeating units of  $(\text{RSiO}_{3/2})_x$  where X is less than 2000.

279. (Previously Presented) The cosmetic composition according to claim 278, wherein x is 500 or less.

280. (Previously Presented) The cosmetic composition according to claim 277, wherein said silsesquioxanes are chosen from polymethylsilsesquioxanes comprising repeating units of formula  $(\text{CH}_3\text{SiO}_{3/2})$ .

281. (Previously Presented) The cosmetic composition according to claim 277, wherein said siloxysilicates are chosen from trimethylsiloxysilicates.

282. (Previously Presented) The cosmetic composition according to claim 281, wherein said trimethylsiloxysilicates comprise repeating units of  $[(\text{CH}_3)_3\text{-Si-O}]_x\text{-(SiO}_{4/2})_y$ , where x ranges from 50 to 80 and y ranges from 50 to 80.

283. (Previously Presented) The cosmetic composition according to claim 280, wherein said polymethylsilsesquioxanes comprising repeating units of formula  $(\text{CH}_3\text{SiO}_{3/2})$  further comprise up to 1% of polymerized repeating units of formula  $(\text{CH}_3)_2\text{SiO}_{2/2}$ .

284. (Previously Presented) The cosmetic composition according to claim 245, wherein the at least one film-forming silicone resin comprises at least two units chosen from M, D, T, and Q and said at least two units satisfy the relationship  $\text{R}_n\text{SiO}_{(4-n)/2}$  wherein n is a value ranging from 1.0 to 1.50.

285. (Previously Presented) The cosmetic composition according to claim 284, wherein said at least one film-forming silicone resin is a solid at 25°C.

286. (Previously Presented) The cosmetic composition according to claim 284, wherein said at least one film-forming silicone resin has a weight average molecular weight ranging from 1000 to 10000 grams/mole.

287. (Previously Presented) The cosmetic composition according to claim 245, wherein said at least one film-forming silicone resin comprises repeating M units and repeating Q units.

288. (Previously Presented) The cosmetic composition according to claim 287, wherein the ratio of M units to Q units is 0.7:1.

289. (Previously Presented) The cosmetic composition according to claim 245, wherein said composition further comprises at least one additional film-former.

290. (Previously Presented) The cosmetic composition according to claim 245, wherein the composition is in a form chosen from a fluid anhydrous gel, rigid anhydrous gel, fluid simple emulsion, rigid simple emulsion, fluid multiple emulsion, and rigid multiple emulsion.

291. (Previously Presented) The cosmetic composition according to claim 245, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

292. (Previously Presented) The cosmetic composition according to claim 245, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

293. (Previously Presented) The make-up and/or care and/or treatment composition according to claim 247, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

294. (Previously Presented) The make-up and/or care and/or treatment composition according to claim 247, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

295. (Previously Presented) The method according to claim 253, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

296. (Previously Presented) The method according to claim 253, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

297. (Previously Presented) The method according to claim 254, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

298. (Previously Presented) The method according to claim 254, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

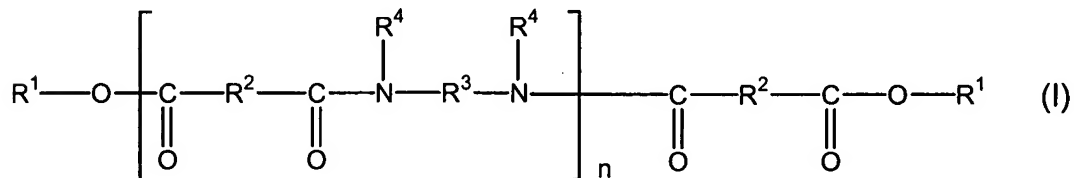


PENDING CLAIMS  
Application No. 09/733,900  
Attorney Docket No. 05725.0595  
Filed: December 12, 2000

1. - 320. (Canceled)

321. (Previously presented) A mascara, an eyeliner, a foundation, a lipstick, a blusher, a make-up-removing product, a make-up product for the body, an eyeshadow, a face powder, a concealer product, a nail composition, a shampoo, a conditioner, an anti-sun product or a care product for the skin, lips, or hair comprising a composition comprising at least one liquid fatty phase in said mascara, eyeliner, foundation, blusher, lipstick, make-up-removing product, make-up product for the body, eyeshadow, face powder, concealer product, nail composition, shampoo, conditioner, antisun product or care product for the skin, lips, or hair which comprises:

(i) at least one structuring polymer chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups having at least 4 carbon atoms and alkenyl groups having at least 4 carbon atoms;



-  $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$

hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

-  $R^3$ , which are identical or different, are each chosen from  $C_2$  to  $C_{36}$

hydrocarbon-based groups; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen and  $C_1$  to

$C_{10}$  alkyl groups, with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen; and

(ii) at least one oil-soluble cationic surfactant.

322. (Original) The composition according to claim 321, wherein said composition is a solid.

323. (Canceled)

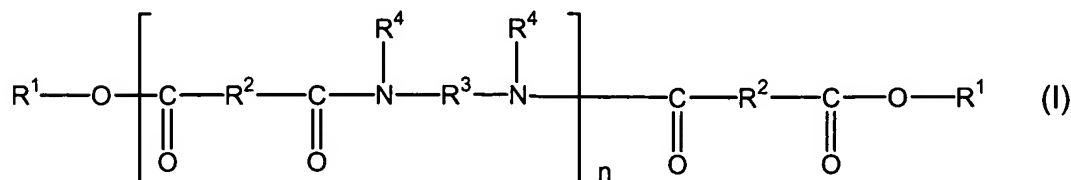
324. (Canceled)

325. (Previously presented) A make-up and/or care and/or treatment composition for keratinous fibers comprising:

at least one liquid fatty phase in said composition which comprises:

(i) at least one structuring polymer chosen from polyamide polymers of formula

(I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups\_ comprised in said at least one structuring polymer;

-  $R^1$ , which are identical or different, are each chosen from alkyl groups having at least 4 carbon atoms and alkenyl groups having at least 4 carbon atoms;

-  $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

-  $R^3$ , which are identical or different, are each chosen from  $C_2$  to  $C_{36}$  hydrocarbon-based groups; and

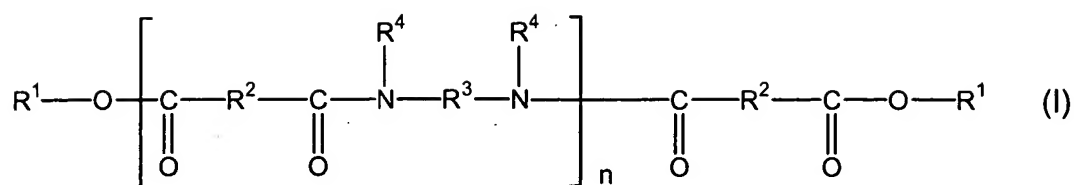
-  $R^4$ , which are identical or different, are each chosen from hydrogen and  $C_1$  to  $C_{10}$  alkyl groups, with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen; and

(ii) at least one oil-soluble cationic surfactant.

326. - 329. (Canceled)

330. (Previously presented) A treatment, care or make-up composition for keratinous fibers comprising a structured composition containing

(i) at least one liquid fatty phase structured with at least one structuring polymer chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups having at least 4 carbon atoms and alkenyl groups having at least 4 carbon atoms;

- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- R<sup>3</sup>, which are identical or different, are each chosen from C<sub>2</sub> to C<sub>36</sub> hydrocarbon-based groups; and

- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen and C<sub>1</sub> to C<sub>10</sub> alkyl groups, with the proviso that at least 50% of all R<sup>4</sup> are chosen from hydrogen,

(ii) at least one oil-soluble cationic surfactant, and

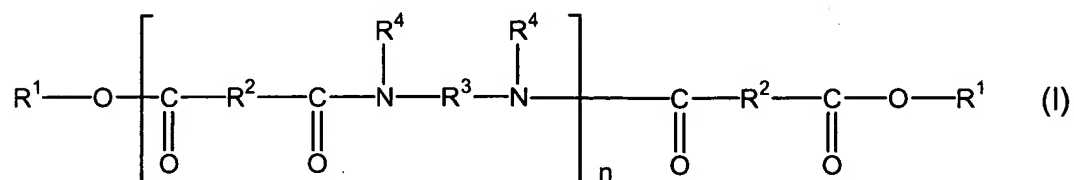
(iii) at least one coloring agent.

331. - 333. (Canceled)

334. (Previously presented) A method for care, make up, or treatment of a keratin material chosen from lips, skin, and keratinous fibers, comprising applying to said keratin material of a cosmetic composition comprising:

at least one liquid fatty phase which comprises:

(i) at least one structuring polymer chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups having at least 4 carbon atoms and alkenyl groups having at least 4 carbon atoms;

- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- R<sup>3</sup>, which are identical or different, are each chosen from C<sub>2</sub> to C<sub>36</sub> hydrocarbon-based groups; and

- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen and C<sub>1</sub> to C<sub>10</sub> alkyl groups, with the proviso that at least 50% of all R<sup>4</sup> are chosen from hydrogen;  
and

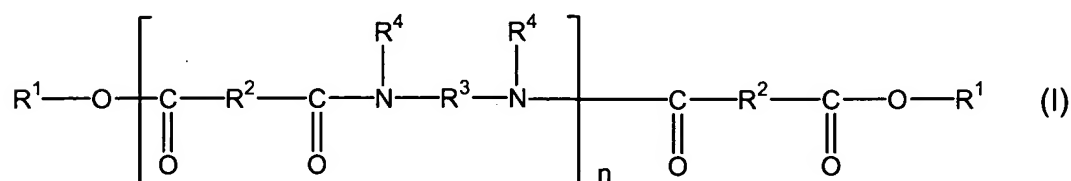
(ii) at least one oil-soluble cationic surfactant.

335. (Previously presented) A method for making a cosmetic composition in the form of a physiologically acceptable composition comprising including in said composition

at least one liquid fatty phase which comprises:

(i) at least one structuring polymer chosen from polyamide polymers of formula

(I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups having at least 4 carbon atoms and alkenyl groups having at least 4 carbon atoms;

-  $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$

hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

-  $R^3$ , which are identical or different, are each chosen from  $C_2$  to  $C_{36}$

hydrocarbon-based groups; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen and  $C_1$  to

$C_{10}$  alkyl groups, with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen; and

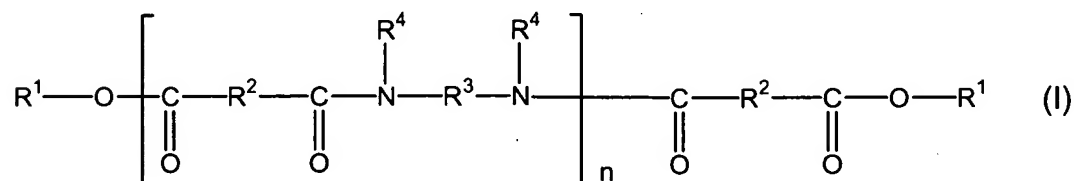
(ii) at least one oil-soluble cationic surfactant.

336. (Canceled)

337. (Original) A method for providing at least one of resistance to shear and stability to a cosmetic composition, comprising including in said cosmetic composition a cosmetic composition at least one liquid fatty phase which comprises:

(i) at least one structuring polymer chosen from polyamide polymers of formula

(I):



in which:

-  $n$  is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from

10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- $R^1$ , which are identical or different, are each chosen from alkyl groups having at least 4 carbon atoms and alkenyl groups having at least 4 carbon atoms;

- $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

- $R^3$ , which are identical or different, are each chosen from  $C_2$  to  $C_{36}$  hydrocarbon-based groups; and

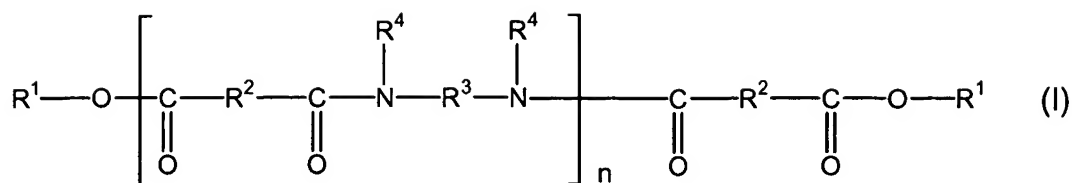
- $R^4$ , which are identical or different, are each chosen from hydrogen and  $C_1$  to  $C_{10}$  alkyl groups, with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen; and

(ii) at least one oil-soluble cationic surfactant,

and further wherein said at least one structuring polymer and said at least one oil-soluble cationic surfactant are present in a combined amount effective to provide at least one property chosen from resistance to shear and stability.

338. (Previously presented) A make up, care, or treatment composition for the skin or lips comprising a structured composition comprising

- (i) at least one liquid fatty phase in said make up, care, or treatment composition structured with at least one structuring polymer chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups having at least 4 carbon atoms and alkenyl groups having at least 4 carbon atoms;

- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- R<sup>3</sup>, which are identical or different, are each chosen from C<sub>2</sub> to C<sub>36</sub> hydrocarbon-based groups; and

- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen and C<sub>1</sub> to C<sub>10</sub> alkyl groups, with the proviso that at least 50% of all R<sup>4</sup> are chosen from hydrogen, and

(ii) at least one oil-soluble cationic surfactant.

339. - 347. (Canceled)



348. (Previously presented) The mascara, eyeliner, foundation, lipstick, blusher, make-up-removing product, make-up product for the body, eyeshadow, face powder, concealer product, nail composition, shampoo, conditioner, anti-sun product or care product for the skin, lips, or hair according to claim 321, wherein the at least one oil-soluble cationic surfactant is lauryl methyl gluceth-10-hydroxypropyl dimmonium chloride.

349. (Previously presented) The make-up and/or care and/or treatment composition according to claim 325, wherein the at least one oil-soluble cationic surfactant is lauryl methyl gluceth-10-hydroxypropyl dimmonium chloride.

350. (Previously presented) The treatment, care or make-up composition according to claim 330, wherein the at least one oil-soluble cationic surfactant is lauryl methyl gluceth-10-hydroxypropyl dimmonium chloride.

351. (Previously presented) The method for care, make up, or treatment according to claim 334, wherein the at least one oil-soluble cationic surfactant is lauryl methyl gluceth-10-hydroxypropyl dimmonium chloride.

352. (Previously presented) The method for making a cosmetic composition according to claim 335, wherein the at least one oil-soluble cationic surfactant is lauryl methyl gluceth-10-hydroxypropyl dimmonium chloride.

353. (Previously presented) The method for providing at least one of resistance to shear and stability to a cosmetic composition according to claim 337, wherein the at

least one oil-soluble cationic surfactant is lauryl methyl gluceth-10-hydroxypropyl dimmonium chloride.

354. (Previously presented) The make up, care, or treatment composition according to claim 338, wherein the at least one oil-soluble cationic surfactant is lauryl methyl gluceth-10-hydroxypropyl dimmonium chloride.

355. (Previously presented) The mascara, eyeliner, foundation, lipstick, blusher, make-up-removing product, make-up product for the body, eyeshadow, face powder, concealer product, nail composition, shampoo, conditioner, anti-sun product or care product for the skin, lips, or hair according to claim 321, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

356. (Previously presented) The make-up and/or care and/or treatment composition according to claim 325, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

357. (Previously presented) The treatment, care or make-up composition according to claim 330, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

358. (Previously presented) The method for care, make up, or treatment according to claim 334, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

359. (Previously presented) The method for making a cosmetic composition according to claim 335, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

360. (Previously presented) The method for providing at least one of resistance to shear and stability to a cosmetic composition according to claim 337, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

362. (Previously presented) The make up, care, or treatment composition according to claim 338, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

363. (Previously presented) The mascara, an eyeliner, a foundation, a lipstick, a blusher, a make-up-removing product, a make-up product for the body, an eyeshadow, a face powder, a concealer product, a nail composition, a shampoo, a conditioner, an anti-sun product or a care product for the skin, lips, or hair according to claim 321, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

364. (Previously presented) The make-up and/or care and/or treatment composition according to claim 325, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

365. (Previously presented) The treatment, care or make-up composition according to claim 330, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

366. (Previously presented) The method for care, make up, or treatment according to claim 334, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

367. (Previously presented) The method for making a cosmetic composition according to claim 335, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

368. (Previously presented) The method for providing at least one of resistance to shear and stability to a cosmetic composition according to claim 337, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

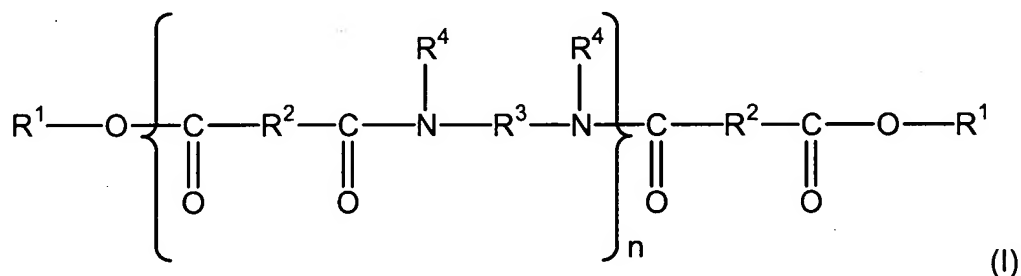
369. (Previously presented) The make up, care, or treatment composition according to claim 338, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.



PENDING CLAIMS  
Application No. 09/618,066  
Attorney Docket No. 05725.0656-00000  
Filed: July 17, 2000

1-156. (Cancelled)

157. (Previously presented) A process for non-migrating deposit of a lipstick composition comprising including in said lipstick composition at least one liquid continuous fatty phase, said at least one liquid continuous fatty phase being structured with a sufficient amount of an agent for non-migrating deposit of said lipstick composition, said agent comprising at least one structuring polymer, wherein said at least one structuring polymer is chosen from polymers of formula (I) below:



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

- $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;
- $R^3$ , which are identical or different, are each chosen from  $C_2$  to  $C_{36}$  hydrocarbon-based groups; and
- $R^4$ , which are identical or different, are each chosen from hydrogen and  $C_1$  to  $C_{10}$  alkyl groups, with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen; and

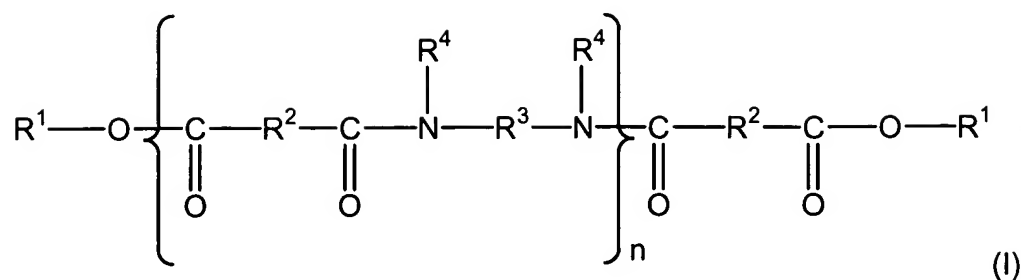
wherein said lipstick composition further comprises at least one dyestuff chosen from pigments and nacles.

158. (Previously presented) A process according to Claim 157, wherein said lipstick composition has a hardness ranging from 20 g to 2000 g.

159. (Original) A process according to Claim 158, wherein said hardness ranges from 20 g to 900 g.

160. (Original) A process according to Claim 159, wherein said hardness ranges from 20 g to 600 g.

161. (Previously presented) A process for non-migrating deposit of a lipstick composition comprising at least one continuous liquid fatty phase comprising structuring said fatty phase with a sufficient amount of at least one structuring polymer, wherein said at least one structuring polymer is chosen from polymers of formula (I) below:



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

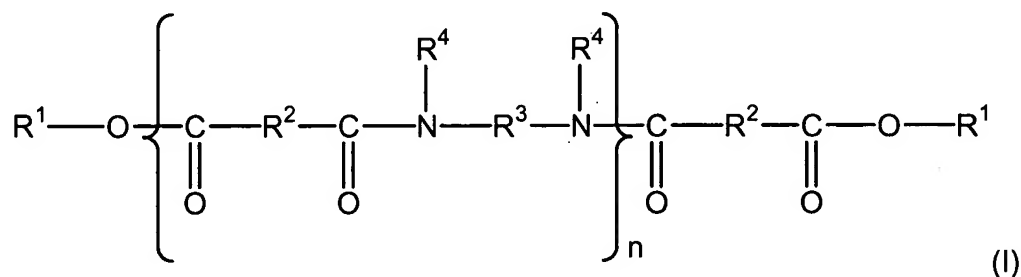
- R<sup>3</sup>, which are identical or different, are each chosen from C<sub>2</sub> to C<sub>36</sub> hydrocarbon-based groups; and

- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen and C<sub>1</sub> to C<sub>10</sub> alkyl groups, with the proviso that at least 50% of all R<sup>4</sup> are chosen from hydrogen; and

wherein said lipstick composition further comprises at least one dyestuff chosen from pigments and nacles.

162-167. (Cancelled)

168. (Previously presented) A process for non-migrating deposit of a foundation composition comprising including in said foundation composition at least one liquid continuous fatty phase, said at least one liquid continuous fatty phase being structured with a sufficient amount of an agent for non-migrating deposit of said foundation composition, said agent comprising at least one structuring polymer, wherein said at least one structuring polymer is chosen from polymers of formula (I) below:



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- R<sup>3</sup>, which are identical or different, are each chosen from C<sub>2</sub> to C<sub>36</sub> hydrocarbon-based groups; and



- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen and C<sub>1</sub> to C<sub>10</sub> alkyl groups, with the proviso that at least 50% of all R<sup>4</sup> are chosen from hydrogen; and

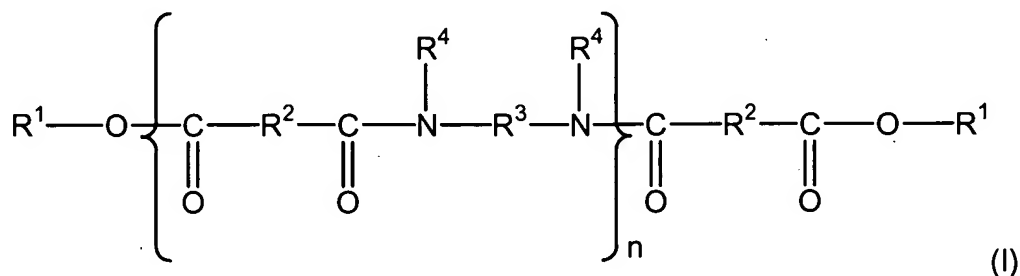
wherein said foundation composition further comprises at least one dyestuff chosen from pigments and nacres.

169. (Previously presented) A process according to Claim 168, wherein said foundation composition has a hardness ranging from 20 g to 2000 g.

170. (Previously presented) A process according to Claim 169, wherein said hardness ranges from 20 g to 900 g.

171. (Previously presented) A process according to Claim 170, wherein said hardness ranges from 20 g to 600 g.

172. (Previously presented) A process for non-migrating deposit of a foundation composition comprising at least one continuous liquid fatty phase comprising structuring said fatty phase with a sufficient amount of at least one structuring polymer, wherein said at least one structuring polymer is chosen from polymers of formula (I) below:



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges

from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- $R^1$ , which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

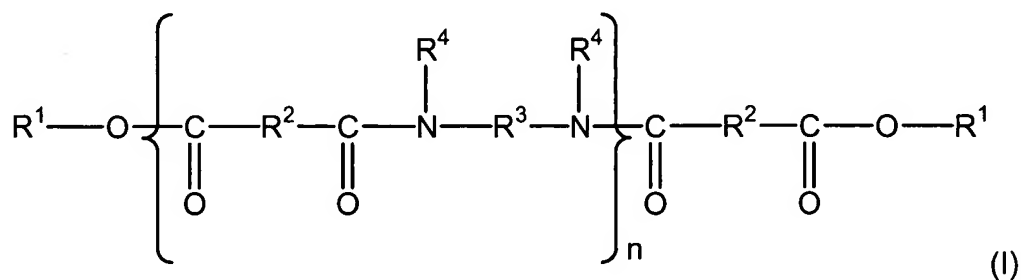
- $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

- $R^3$ , which are identical or different, are each chosen from  $C_2$  to  $C_{36}$  hydrocarbon-based groups; and

- $R^4$ , which are identical or different, are each chosen from hydrogen and  $C_1$  to  $C_{10}$  alkyl groups, with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen; and

wherein said foundation composition further comprises at least one dyestuff chosen from pigments and nacles.

173. (Previously presented) A process for non-migrating deposit of a composition for making up at least one keratinous material comprising at least one continuous liquid fatty phase comprising structuring said fatty phase with a sufficient amount of at least one structuring polymer, wherein said at least one structuring polymer is chosen from polymers of formula (I) below:



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- R<sup>3</sup>, which are identical or different, are each chosen from C<sub>2</sub> to C<sub>36</sub> hydrocarbon-based groups; and

- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen and C<sub>1</sub> to C<sub>10</sub> alkyl groups, with the proviso that at least 50% of all R<sup>4</sup> are chosen from hydrogen; and

wherein said composition for making up at least one keratinous material further comprises at least one dyestuff chosen from pigments and nacles.

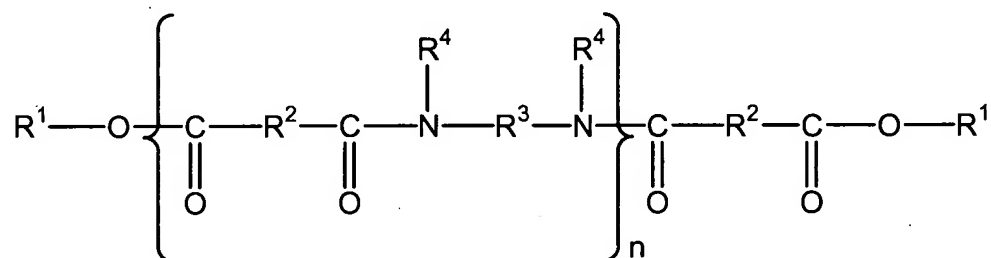
174. (Previously presented) A process according to claim 173, wherein said at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.



Pending Claims  
Application No. 09/685,577  
Attorney Docket No.: 05725.0656-01000  
Filed: October 11, 2000

1. (Previously presented) A structured cosmetic composition comprising:  
at least one continuous liquid fatty phase,

wherein said at least one continuous liquid fatty phase is structured with a sufficient amount of at least one polymer of formula (I) and mixtures thereof:



in which:

- $n$  is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- $\text{R}^1$ , which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;

- $\text{R}^2$ , which are identical or different, are each chosen from  $\text{C}_4$  to  $\text{C}_{42}$  hydrocarbon-based groups with the proviso that at least 50% of  $\text{R}^2$  are chosen from  $\text{C}_{30}$  to  $\text{C}_{42}$  hydrocarbon-based groups;

-  $R^3$ , which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms with the proviso that  $R^3$  comprises at least 2 carbon atoms; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen atoms,  $C_1$  to  $C_{10}$  alkyl groups and a direct bond to group chosen from  $R^3$  and another  $R^4$  such that when said at least one group is chosen from another  $R^4$ , the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined in part by  $R^4-N-R^3$ , with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen atoms;

wherein said structured composition is in the form of a non-migrating, wax-free solid, and

wherein said at least one continuous liquid fatty phase and said at least one polymer form a physiologically acceptable medium.

2 - 46. (Canceled)

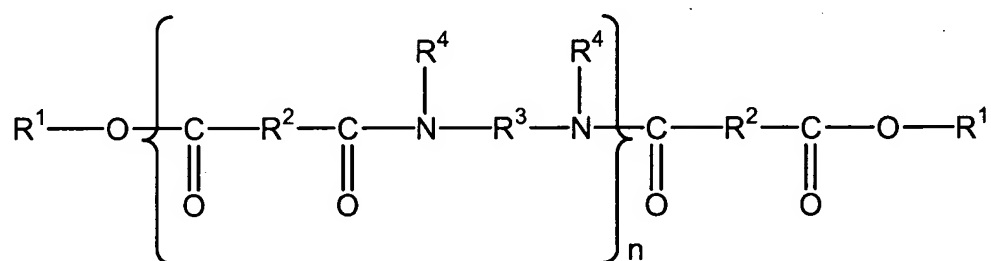
47. (Original) A composition according to Claim 1, further comprising at least one amphiphilic compound chosen from amphiphilic compounds which are liquid at room temperature and have an HLB value of less than 12.

48. (Original) A composition according to Claim 47, wherein said HLB value ranges from 1 to 7.

49. (Original) A composition according to Claim 47, wherein said HLB value ranges from 1 to 5.

50 - 149. (Canceled)

150. (Previously presented) A process of structuring a cosmetic composition in the form of a physiologically acceptable composition, which is wax-free and non-migrating comprising including in said composition at least one liquid continuous fatty phase, said at least one liquid continuous fatty phase being structured with a sufficient amount of at least one polymer of formula (I) and mixtures thereof:



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- $R^1$ , which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;

- $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

- $R^3$ , which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms

and nitrogen atoms with the proviso that  $R^3$  comprises at least 2 carbon atoms;  
and

-  $R^4$ , which are identical or different, are each chosen from hydrogen atoms,  $C_1$  to  $C_{10}$  alkyl groups and a direct bond to group chosen from  $R^3$  and another  $R^4$  such that when said at least one group is chosen from another  $R^4$ , the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined in part by  $R^4-N-R^3$ , with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen atoms;and

wherein said composition is wax-free and non-migrating.

151 - 153. (Canceled)

154. (Original) A process according to Claim 150, wherein said at least one structuring polymer is combined with at least one amphiphilic compound that is liquid at room temperature, with an HLB value of less than 12.

155. (Original) A process according to Claim 154, wherein said HLB ranges from 1 to 7.

156. (Original) A process according to Claim 155, wherein said HLB ranges from 1 to 5.

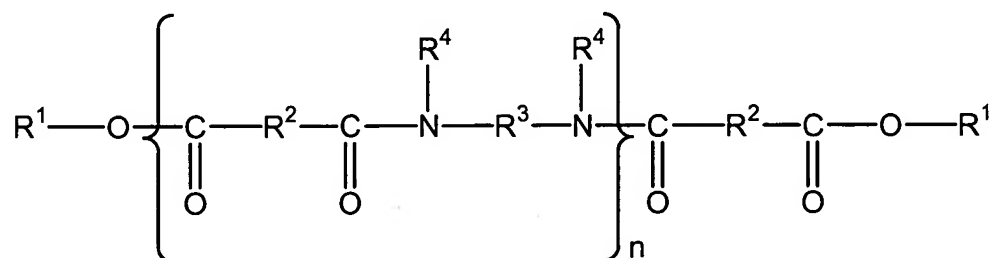
157 - 188. (Canceled)



Pending Claims  
Application No. 09/685,578  
Attorney Docket No. 05725.0659-01000  
Filed: October 11, 2000

1. (Currently amended) A structured mascara composition comprising at least one liquid fatty phase,

wherein said at least one liquid fatty phase is structured with a sufficient amount of at least one structuring polymer, wherein said at least one structuring polymer is chosen from polymers of formula (I) below and mixtures thereof:



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;

- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;



-  $R^3$ , which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms with the proviso that  $R^3$  comprises at least 2 carbon atoms; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen atoms,  $C_1$  to  $C_{10}$  alkyl groups and a direct bond to a group chosen from  $R^3$  and another  $R^4$  such that when said at least one group is chosen from another  $R^4$ , the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined in part by  $R^4-N-R^3$ , with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen atoms; and

wherein said at least one structuring polymer is combined with at least one amphiphilic compound which has an HLB value of less than 8, and with at least one dyestuff.

2 - 11. (Canceled)

12. (Original) A composition according to Claim 1, wherein said at least one amphiphilic compound comprises at least one lipophilic part bonded to at least one polar part.

13. (Original) A composition according to Claim 12, wherein said at least one lipophilic part comprises a carbon-based chain comprising at least 8 carbon atoms.

14. (Original) A composition according to Claim 13, wherein said at least one lipophilic part comprises from 16 to 32 carbon atoms.

15. (Original) A composition according to Claim 14, where said at least one lipophilic part comprises from 18 to 28 carbon atoms.

16. (Original) A composition according to Claim 12, wherein said at least one polar part is chosen from compounds derived from alcohols comprising from 1 to 12 hydroxyl groups, polyol groups comprising from 2 to 12 hydroxyl groups, and polyoxyalkylene groups comprising at least 2 oxyalkylene units.

17. (Original) A composition according to Claim 16, wherein said polyoxyalkylene groups are chosen from polyoxyalkylene groups which comprise from 0 to 20 oxypropylene units and from 0 to 20 oxyethylene units.

18. (Original) A composition according to Claim 1, wherein said at least one amphiphilic compound is chosen from esters.

19. (Original) A composition according to Claim 18, wherein said esters are chosen from hydroxystearates of glycerol, oleates of glycerol, isostearates of glycerol, hydroxystearates of sorbitan, oleates of sorbitan, isostearates of sorbitan, hydroxystearates of methylglucose, oleates of methylglucose, isostearates of methylglucose, hydroxystearates of branched C<sub>12</sub> to C<sub>26</sub> fatty alcohols, oleates of branched C<sub>12</sub> to C<sub>26</sub> fatty alcohols and isostearates of branched C<sub>12</sub> to C<sub>26</sub> fatty alcohols.

20. (Original) A composition according to Claim 19, wherein said branched C<sub>12</sub> to C<sub>26</sub> fatty alcohols are chosen from octyldodecanols.

21. (Original) A composition according to Claim 18, wherein said esters are chosen from monoesters and diesters.

22. (Original) A composition according to Claim 1, wherein said at least one amphiphilic compound is present in a concentration ranging from 0.1% to 35% by weight of the total weight of said composition.

23. (Original) A composition according to Claim 22, wherein said at least one amphiphilic compound is present in a concentration ranging from 2% to 15% by weight of the total weight of said composition.

24. (Original) A composition according to Claim 1, wherein said at least one structuring polymer is present in a concentration ranging from 0.5% to 80% by weight of the total weight of said composition.

25. (Original) A composition according to Claim 24, wherein said at least one structuring polymer is present in a concentration ranging from 5% to 40% by weight of the total weight of said composition.

26. (Original) A composition according to Claim 1, wherein said at least one liquid fatty phase comprises greater than 40% by weight of the total weight of said at least one liquid fatty phase of at least one apolar oil.

27. (Original) A composition according to Claim 26, wherein said at least one liquid fatty phase comprises greater than 50% by weight of the total weight of said at least one liquid fatty phase of at least one apolar oil.

28. (Original) A composition according to Claim 1, wherein said at least one liquid fatty phase comprises at least one oil.

29. (Original) A composition according to Claim 28, wherein said at least one oil is chosen hydrocarbon-based oils of mineral origin and hydrocarbon-based oils of synthetic origin.

30. (Original) A composition according to Claim 1, wherein said at least one liquid fatty phase comprises at least one apolar oil.

31. (Original) A composition according to Claim 30, wherein said at least one apolar oil is chosen from parleam oil, isoparaffins and squalane.

32. (Original) A composition according to Claim 1, wherein said at least one liquid fatty phase is present in a concentration ranging from 5% to 99% by weight of the total weight of said composition.

33. (Original) A composition according to Claim 32, wherein said at least one liquid fatty phase is present in a concentration ranging from 20% to 75% by weight of the total weight of said composition.

34. (Canceled)

35. (Canceled)

36. (Previously presented) A composition according to Claim 1, wherein said at least one dyestuff is chosen from lipophilic dyes, hydrophilic dyes, pigments and nacles.

37. (Previously presented) A composition according to Claim 1, wherein said at least one dyestuff is present in a concentration ranging from 0.01% to 40% by weight relative to the total weight of said composition.

38. (Original) A composition according to Claim 37, wherein said at least one dyestuff is present in a concentration ranging from 5% to 25% by weight relative to the total weight of said composition.

39 - 41. (Canceled)

42. (Original) A composition according to Claim 1, further comprising at least one suitable additive chosen from water optionally thickened or gelled with an aqueous-phase thickener or gelling agent, antioxidants, essential oils, preserving agents, fragrances, neutralizing agents, liposoluble polymers, cosmetically active agents, dermatologically active agents and waxes.

43. (Original) A composition according to Claim 1, wherein said composition is in a form chosen from a paste, a solid, a cream, an oil-in-water emulsion, a water-in-oil emulsion and an anhydrous gel, optionally translucent or transparent.

44 - 48. (Canceled)

49. (Original) A composition according to Claim 1, wherein said at least one amphiphilic compound has an HLB value ranging from 1 to 7.

50. (Original) A composition according to Claim 49, wherein said at least one amphiphilic compound has an HLB value ranging from 1 to 5.

51. (Original) A composition according to Claim 50, wherein said at least one amphiphilic compound has an HLB value ranging from 3 to 5.

52 - 74. (Canceled)

75. (Original) A composition according to Claim 1, wherein said composition has a hardness ranging from 20 g to 2000 g.

76. (Original) A composition according to Claim 75, wherein said composition has a hardness ranging from 20 g to 900 g.

77. (Original) A composition according to Claim 76, wherein said composition has a hardness ranging from 20 g to 600 g.

78 - 102. (Canceled)

103. (Previously presented) A composition according to Claim 1, wherein said at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

104. (New) A composition according to Claim 1, wherein said at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

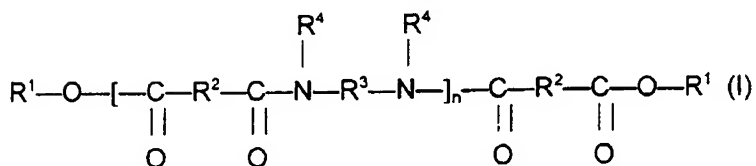


PENDING CLAIMS  
Application No. 10/182,830  
Attorney Docket No. 05725.0795-01000  
Filed: August 2, 2002

Claims 1-103. (Canceled)

104. (Previously presented) A method of making a mascara composition comprising including in said mascara composition:

- (i) at least one solid substance that has a melting point of about 45°C or greater;
- (ii) isododecane;
- (iii) at least one structuring polymer chosen from polymers of following formula (I):



in which n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

-  $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$

hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

-  $R^3$ , which are identical or different, are each chosen from  $C_2$  to  $C_{36}$

hydrocarbon-based groups; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen and  $C_1$  to

$C_{10}$  alkyl groups, with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen;

- (iv) water;
- (v) at least one coloring agent; and
- (vi) at least one preservative.

105-106. (Canceled).

107. (Previously presented) The method of making a mascara composition according to claim 104, further comprising including at least one neutralizing agent.

108. (Previously presented) A method of making a mascara composition comprising including in said mascara composition:

- (i) at least one solid substance that has a melting point of about  $45^{\circ}\text{C}$  or greater;
- (ii) isododecane;
- (iii) at least one structuring polymer chosen from ethylenediamine/stearyl

dimer tallate copolymer;



- (iv) water;
- (v) at least one coloring agent; and
- (vi) at least one preservative.

109. (Canceled).

110. (Canceled).

111. (Previously presented) The method of making a mascara composition according to claim 108, further comprising including at least one neutralizing agent.

112. (Previously presented) A method of making a mascara composition comprising including in said mascara composition:

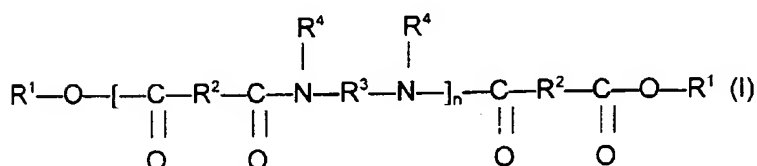
- (i) at least one solid substance that has a melting point of about 45°C or greater;
- (ii) isododecane;
- (iii) at least one structuring polymer chosen from ethylenediamine/stearyl dimer dilinoleate copolymer;
- (iv) water;
- (v) at least one coloring agent; and
- (vi) at least one preservative.

113. (Previously presented) The method of making a mascara composition according to claim 112, further comprising including at least one neutralizing agent.

114. (Previously presented) A method of making a mascara composition comprising mixing:

- (i) at least one solid substance that has a melting point of about 45°C or greater;
- (ii) isododecane;
- (iii) at least one structuring polymer chosen from polymers of following formula

(I):



in which n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

-  $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$

hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

-  $R^3$ , which are identical or different, are each chosen from  $C_2$  to  $C_{36}$

hydrocarbon-based groups; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen and  $C_1$  to

$C_{10}$  alkyl groups, with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen;

- (iv) water;
- (v) at least one coloring agent; and
- (vi) at least one preservative.

115. (Previously presented) The method of making a mascara composition according to claim 114, further comprising mixing at least one neutralizing agent.

116. (Previously presented) A method of making a mascara composition comprising mixing:

- (ii) at least one solid substance that has a melting point of about  $45^{\circ}\text{C}$  or greater;
- (ii) isododecane;
- (iii) at least one structuring polymer chosen from ethylenediamine/stearyl

dimer tallate copolymer;

- (iv) water;
- (v) at least one coloring agent; and

- (vi) at least one preservative.

117. (Previously presented) The method of making a mascara composition according to claim 116, further comprising mixing at least one neutralizing agent.

118. (Previously presented) A method of making a mascara composition comprising mixing:

- (i) at least one solid substance that has a melting point of about 45°C or greater;
- (ii) isododecane;
- (iii) at least one structuring polymer chosen from ethylenediamine/stearyl dimer dilinoleate copolymer;
- (iv) water;
- (v) at least one coloring agent; and
- (vi) at least one preservative.

119. (Previously presented) The method of making a mascara composition according to claim 118, further comprising mixing at least one neutralizing agent.

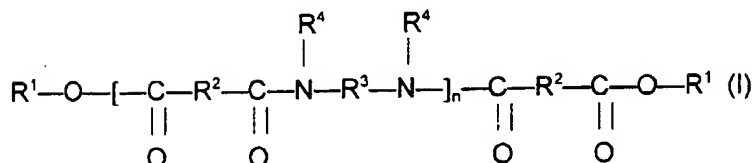
120. (Previously presented) A method of making a mascara composition comprising mixing:

- (iii) at least one solid substance that has a melting point of about 45°C or greater;

(ii) isododecane;

(iii) at least one structuring polymer chosen from polymers of following formula

(I):



in which n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

-  $R^1$ , which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

-  $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

-  $R^3$ , which are identical or different, are each chosen from  $C_2$  to  $C_{36}$  hydrocarbon-based groups; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen and  $C_1$  to  $C_{10}$  alkyl groups, with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen;

(iv) water; and

(v) at least one preservative.

121. (Previously presented) The method of making a mascara composition according to claim 120, further comprising mixing at least one neutralizing agent.

122. (Previously presented) A method of making a mascara composition comprising mixing:

- (iii) at least one solid substance that has a melting point of about 45°C or greater;
- (ii) isododecane;
- (iii) at least one structuring polymer chosen from ethylenediamine/stearyl dimer tallate copolymer;
- (iv) water; and
- (v) at least one preservative.

123. (Previously presented) The method of making a mascara composition according to claim 122, further comprising mixing at least one neutralizing agent.

124. (Previously presented) A method of making a mascara composition comprising mixing:

- (i) at least one solid substance that has a melting point of about 45°C or greater;
- (ii) isododecane;

(iii) at least one structuring polymer chosen from ethylenediamine/stearyl  
dimer dilinoleate copolymer;

(iv) water; and

(v) at least one preservative.

125. (Previously presented) The method of making a mascara composition according to claim 124, further comprising mixing at least one neutralizing agent.

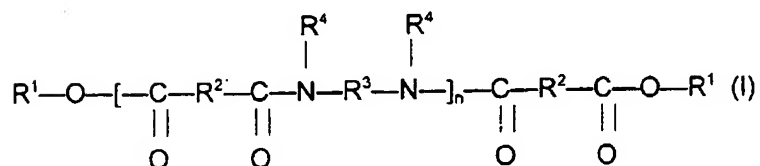
126. (Previously presented) A method of making a mascara composition comprising including in said mascara composition:

(iv) at least one solid substance that has a melting point of about 45°C or greater;

(ii) isododecane;

(iii) at least one structuring polymer chosen from polymers of following formula

(I):



in which n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from

10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

-  $R^1$ , which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

-  $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

-  $R^3$ , which are identical or different, are each chosen from  $C_2$  to  $C_{36}$  hydrocarbon-based groups; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen and  $C_1$  to  $C_{10}$  alkyl groups, with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen;

(iv) water; and

(v) at least one preservative.

127. (Previously presented) The method of making a mascara composition according to claim 126, further comprising including at least one neutralizing agent.

128. (Previously presented) A method of making a mascara composition comprising including in said mascara composition:

(iv) at least one solid substance that has a melting point of about 45°C or greater;

(ii) isododecane;



(iii) at least one structuring polymer chosen from ethylenediamine/stearyl  
dimer tallate copolymer;

(iv) water; and

(v) at least one preservative.

129. (Previously presented) The method of making a mascara composition according to claim 128, further comprising including at least one neutralizing agent.

130. (Previously presented) A method of making a mascara composition comprising including in said mascara composition:

(i) at least one solid substance that has a melting point of about 45°C or greater;

(ii) isododecane;

(iii) at least one structuring polymer chosen from ethylenediamine/stearyl  
dimer dilinoleate copolymer;

(iv) water; and

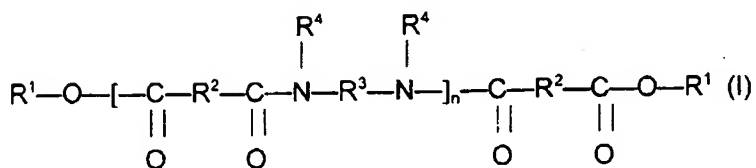
(v) at least one preservative.

131. (Previously presented) The method of making a mascara composition according to claim 130, further comprising including at least one neutralizing agent.

132. (Previously presented) A mascara product comprising:

(i) a packaging article;

- (ii) a mascara composition comprising:
- (a) at least one solid substance that has a melting point of about 45°C or greater;
- (b) isododecane;
- (c) at least one structuring polymer chosen from polymers of following formula (I):



in which n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- R<sup>3</sup>, which are identical or different, are each chosen from C<sub>2</sub> to C<sub>36</sub> hydrocarbon-based groups; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen and  $C_1$  to  $C_{10}$  alkyl groups, with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen;

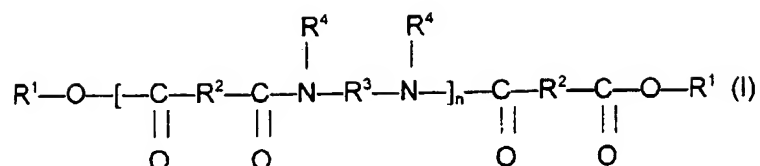
- (d) water;
  - (e) at least one coloring agent; and
  - (f) at least one preservative; and
- (iii) an apparatus for applying said mascara to eyelashes.

133. (Previously presented) A mascara product according to claim 132, wherein said at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

134. (Previously presented) A mascara product according to claim 132, wherein said at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

135. (Previously presented) A mascara product comprising:

- (i) a packaging article;
- (ii) a mascara composition comprising:
  - (a) at least one solid substance that has a melting point of about 45°C or greater;
  - (b) isododecane;
  - (c) at least one structuring polymer chosen from polymers of following formula (I):



in which n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- R<sup>3</sup>, which are identical or different, are each chosen from C<sub>2</sub> to C<sub>36</sub> hydrocarbon-based groups; and

- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen and C<sub>1</sub> to C<sub>10</sub> alkyl groups, with the proviso that at least 50% of all R<sup>4</sup> are chosen from hydrogen;

(d) water; and

(e) at least one preservative; and

(iii) an apparatus for applying said mascara to eyelashes.

136. (Previously presented) A mascara product according to claim 135, wherein said at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

137. (Previously presented) A mascara product according to claim 135, wherein said at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

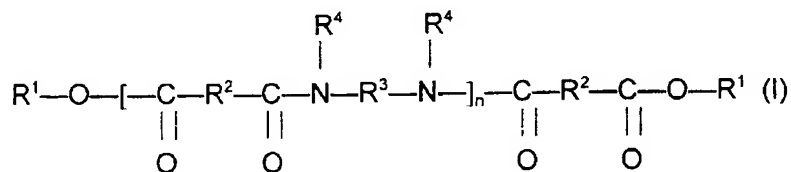


PENDING CLAIMS  
 Application No. 10/787,441  
 Attorney Docket No. 05725.0795-02000  
 Filed: February 27, 2004

Claims 1-119. (Canceled)

120. (New) A method of making up eyelashes comprising applying to said eyelashes a mascara comprising:

- (i) at least one solid substance that has a melting point of about 45°C or greater;
- (ii) isododecane;
- (iii) at least one structuring polymer chosen from polymers of following formula (I):



in which n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

-  $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$

hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

-  $R^3$ , which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms with the proviso that  $R^3$  comprises at least 2 carbon atoms; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen atoms,  $C_1$  to  $C_{10}$  alkyl groups and a direct bond to at least one group chosen from  $R^3$  and another  $R^4$  such that when said at least one group is chosen from another  $R^4$ , the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined in part by  $R^4-N-R^3$ , with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen atoms;

(iv) water;

(v) at least one coloring agent; and

(vi) at least one preservative.

121. (New) The method of making up eyelashes according to claim 120, wherein said mascara further comprises at least one neutralizing agent.

122. (New) A method of making up eyelashes comprising applying to said eyelashes a mascara comprising:

(i) at least one solid substance that has a melting point of about  $45^{\circ}\text{C}$  or greater;

- (ii) isododecane;
- (iii) at least one structuring polymer chosen from ethylenediamine/stearyl dimer tallate copolymers;
- (iv) water;
- (v) at least one coloring agent; and
- (vi) at least one preservative.

123. (New) The method of making up eyelashes according to claim 122, wherein said mascara further comprises at least one neutralizing agent.

124. (New) A method of making up eyelashes comprising applying to said eyelashes a mascara comprising:

- (i) at least one solid substance that has a melting point of about 45°C or greater;
- (ii) isododecane;
- (iii) at least one structuring polymer chosen from ethylenediamine/stearyl dimer dilinoleate copolymers;
- (iv) water;
- (v) at least one coloring agent; and
- (vi) at least one preservative.

125. (New) The method of making up eyelashes according to claim 124, wherein said mascara further comprises at least one neutralizing agent.





PENDING CLAIMS  
 Application No. 09/733,896  
 Attorney Docket No. 05725.0806-00000  
 Filed: December 12, 2000

1-94. (Canceled)

95. (Original) A composition comprising at least one liquid fatty phase which comprises:

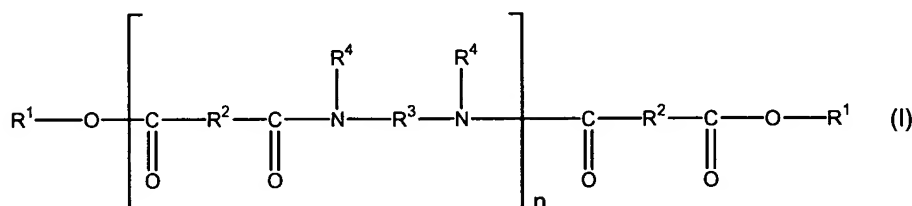
(i) at least one structuring polymer, wherein said at least one structuring polymer is at least one polyamide polymer comprising:

a polymer skeleton which comprises at least one amide repeating unit; and

(ii) at least one oil-soluble polymer chosen from alkyl celluloses and alkylated guar gums.

96-111. (Canceled)

112. (Original) The composition according to claim 95, wherein said at least one polyamide polymer is chosen from polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;

-  $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

-  $R^3$ , which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms with the proviso that  $R^3$  comprises at least 2 carbon atoms; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen atoms,  $C_1$  to  $C_{10}$  alkyl groups and a direct bond to at least one group chosen from  $R^3$  and another  $R^4$  such that when said at least one group is chosen from another  $R^4$ , the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined in part by  $R^4-N-R^3$ , with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen atoms.

113-141. (Canceled)

142. (Original) The composition according to claim 95, wherein said at least one liquid fatty phase of the composition comprises at least one oil.

143. (Original) The composition according to claim 142, wherein said at least one oil is chosen from at least one polar oil and at least one apolar oil.

144. (Original) The composition according to claim 143, wherein said at least one polar oil is chosen from:

- hydrocarbon-based plant oils with a high content of triglycerides comprising fatty acid esters of glycerol in which the fatty acids comprise chains having from 4 to 24 carbon atoms, said chains possibly being chosen from linear and branched, and saturated and unsaturated chains;

- synthetic oils or esters of formula  $R_5COOR_6$  in which  $R_5$  is chosen from linear and branched fatty acid residues comprising from 1 to 40 carbon atoms and  $R_5 + R_6 \geq 10$ ;

- synthetic ethers containing from 10 to 40 carbon atoms;

-  $C_8$  to  $C_{26}$  fatty alcohols; and

-  $C_8$  to  $C_{26}$  fatty acids.

145. (Original) The composition according to claim 143, wherein said at least one apolar oil is chosen from:

- silicone oils chosen from volatile and non-volatile, linear and cyclic polydimethylsiloxanes that are liquid at room temperature;

- polydimethylsiloxanes comprising alkyl or alkoxy groups which are pendant and/or at the end of the silicone chain, the groups each containing from 2 to 24 carbon atoms;

- phenylsilicones; and

- hydrocarbons chosen from linear and branched, volatile and non-volatile hydrocarbons of synthetic and mineral origin.

146. (Original) The composition according to claim 95, wherein said at least one liquid fatty phase comprises at least one non-volatile oil.

147. (Original) The composition according to claim 146, wherein said at least one non-volatile oil is chosen from hydrocarbon-based oils of mineral, plant and synthetic origin, synthetic esters and ethers, and silicone oils.

148-151. (Canceled)

152. (Original) The composition according to claim 95, wherein said at least one liquid fatty phase comprises at least one volatile solvent chosen from hydrocarbon-based solvents and silicone solvents optionally comprising alkyl or alkoxy groups that are pendant or at the end of a silicone chain.

153-157. (Canceled)

158. (Original) The composition according to claim 95, wherein said alkyl celluloses are chosen from ethylcelluloses.

159. (Original) The composition according to claim 95, wherein said alkylated guar gums are chosen from C<sub>1</sub>-C<sub>5</sub> alkyl galactomannans.

160. (Original) The composition according to claim 95, wherein said alkylated guar gums are chosen from ethyl guar.

161-166. (Canceled)

167. (Original) The composition according to claim 95, wherein said at least one liquid fatty phase further comprises a silicone oil.

168. (Original) The composition according to claim 95, further comprising at least one fatty alcohol.

169-178. (Canceled)

179. (Original) A composition according to claim 95, further comprising at least one oil-soluble ester.

180. (Original) The composition according to claim 179 wherein the at least one oil-soluble ester comprises at least one free hydroxy group.

181. (Original) The composition according to claim 179 wherein the at least one oil-soluble ester is not castor oil.

182-281. (Canceled)

282. (Withdrawn) A foundation, mascara, eye liner, concealer, lipstick, blush for cheeks or eyelids, body makeup, sun screen, colorant for skin or hair, skin care formula, shampoo, after shampoo treatment, or makeup removing product comprising:  
at least one liquid fatty phase in said foundation, mascara, eye liner, concealer, lipstick, blush for cheeks or eyelids, body makeup, sun screen, colorant for skin or hair, skin care formula, shampoo, after shampoo treatment, or makeup removing product which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and

(ii) at least one oil-soluble polymer chosen from alkyl celluloses and alkylated guar gums.

283. (Withdrawn) The composition according to claim 282, wherein said composition is a solid.

284. (Withdrawn) An anhydrous deodorant comprising:

at least one liquid fatty phase in said deodorant which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and

(ii) at least one oil-soluble polymer chosen from alkyl celluloses and alkylated guar gums.

285. (Withdrawn) The composition according to claim 284, wherein said composition is a solid.

286. (Canceled)

287. (Withdrawn) A lipstick composition in stick form comprising at least one continuous liquid fatty phase, at least one oil-soluble polymer chosen from alkyl celluloses and alkylated guar gums, and at least one non-waxy structuring polymer having a weight-average molecular mass of less than 100,000 in said lipstick composition, said at least one continuous liquid fatty phase, said at least one oil-soluble polymer, and said at least one non-waxy structuring polymer being present in said lipstick composition.

288-299. (Canceled)

300. (Previously presented) A composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer chosen from ethylenediamine/stearyl dimer tallate copolymer; and

(ii) at least one oil-soluble polymer chosen from alkyl celluloses and alkylated guar gums.

301. (Previously presented) A composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer chosen from ethylenediamine/stearyl dimer dilinoleate copolymer; and

(ii) at least one oil-soluble polymer chosen from alkyl celluloses and alkylated guar gums.





PENDING CLAIMS  
Application No. 09/733,898  
Attorney Docket No. 05725.0808-00000  
Filed: December 12, 2000

Claims 1-335 (canceled).

Claim 336 (new): A composition comprising at least one liquid fatty phase, the liquid fatty phase comprising:

(i) at least one structuring polymer, wherein the at least one structuring polymer is at least one polyamide polymer comprising a polymer skeleton that comprises at least one amide repeating unit and at least one fatty chain chosen from:

(1) at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one terminal fatty chain is bonded to the polymer skeleton via at least one linking group; and

(2) at least one pendant fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one pendant fatty chain is bonded to the polymer skeleton via at least one linking group; and

(ii) at least one oil-soluble ester comprising at least one free hydroxy group, with the proviso that the at least one oil-soluble ester is not castor oil; wherein the at least one oil-soluble ester is present in the composition in an effective amount to increase at least one of stability and gelling efficiency.

Claim 337 (new): The composition of claim 336, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.



Claim 338 (new): The composition of claim 336, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

Claim 339 (new): The composition of claim 336, wherein the at least one oil-soluble ester comprising at least one free hydroxy group is chosen from propylene glycol ricinoleate, isopropyl hydroxystearate, triisocetyl citrate, diisostearyl malate, octyl hydroxystearate, triisoarachidyl citrate, cetyl lactate, dioctyl malate, octyldodecyl hydroxystearate, di-isostearyl malate, and di-isostearyl lactate.

Claim 340 (new): The composition of claim 336, further comprising at least one additional fatty material.

Claim 341 (new): The composition of claim 340, wherein the at least one additional fatty material is chosen from gums, fatty materials pasty at ambient temperature, and resins.

Claim 342 (new): The composition of claim 336, wherein the composition further comprises at least one fatty alcohol.

Claim 343 (new): The composition of claim 342, wherein the at least one fatty alcohol is chosen from C<sub>8</sub> to C<sub>26</sub> fatty alcohols.

Claim 344 (new): The composition of claim 343, wherein the at least one fatty alcohol is chosen from myristyl alcohol, cetyl alcohol, stearyl alcohol, and behenyl alcohol.

Claim 345 (new): The composition of claim 342, wherein the at least one fatty alcohol is present in a concentration ranging from about 0.1% to about 15.0% by weight, relative to the weight of the composition.

Claim 346 (new): The composition of claim 336, further comprising at least one oil-soluble polymer.

Claim 347 (new): The composition of claim 346, wherein the at least one oil-soluble polymer is chosen from guar gums and alkyl celluloses.

Claim 348 (new): The composition of claim 346, wherein the at least one oil-soluble polymer is present in a concentration ranging from about 0.05% to about 10.0% by weight, relative to the weight of the composition.

Claim 349 (new): The composition of claim 336, further comprising at least one wax.

Claim 350 (new): The composition of claim 349, wherein the at least one wax is chosen from carnauba wax, candelilla wax, ouricury wax, Japan wax, cork fiber wax,

sugar cane wax, paraffin waxes, lignite wax, microcrystalline waxes, lanolin wax, montan wax, polyethylene waxes, waxes obtained by Fischer-Tropsch synthesis, silicone waxes, ozokerites, hydrogenated jojoba oil, fatty acid esters, and fatty acid ester glycerides.

Claim 351 (new): The composition of claim 349, wherein the at least one wax is present in a concentration of up to about 50% by weight, relative to the weight of the composition.

Claim 352 (new): The composition of claim 336, further comprising at least one preserving agent.

Claim 353 (new): The composition of claim 352, wherein the at least one preserving agent is chosen from methylparaben, ethylparaben, propylparaben, and butylparaben.

Claim 354 (new): The composition of claim 336, further comprising at least one coloring agent.

Claim 355 (new): The composition of claim 336, wherein the at least one liquid fatty phase further comprises at least one oil.

Claim 356 (new): The composition of claim 355, wherein the at least one oil is chosen from at least one polar oil and at least one apolar oil.

Claim 357 (new): The composition of claim 356, wherein the at least one polar oil is chosen from hydrocarbon-based plant oils with a high content of triglycerides comprising fatty acid esters of glycerol in which the fatty acids comprise chains having from 4 to 24 carbon atoms, said chains optionally being chosen from linear and branched, and saturated and unsaturated chains; synthetic oils or esters of formula  $R_5COOR_6$  in which  $R_5$  is chosen from linear and branched fatty acid residues comprising from 1 to 40 carbon atoms and  $R_5+R_6 \geq 10$ ; synthetic ethers containing from 10 to 40 carbon atoms;  $C_8$  to  $C_{26}$  fatty alcohols; and  $C_8$  to  $C_{26}$  fatty acids.

Claim 358 (new): The composition of claim 356, wherein the at least one apolar oil is chosen from silicone oils chosen from volatile and non-volatile, linear and cyclic polydimethylsiloxanes that are liquid at room temperature; polydimethylsiloxanes comprising alkyl or alkoxy groups which are pendant and/or at the end of the silicone chain, the groups each containing from 2 to 24 carbon atoms; phenylsilicones; and hydrocarbons chosen from linear and branched, volatile and non-volatile hydrocarbons of synthetic and mineral origin.

Claim 359 (new): The composition of claim 336, wherein the at least one liquid fatty phase further comprises at least one non-volatile oil.

Claim 360 (new): The composition of claim 359, wherein the at least one non-volatile oil is chosen from hydrocarbon-based oils of mineral, plant and synthetic origin, synthetic esters and ethers, and silicone oils.

Claim 361 (new): The composition of claim 336, wherein the at least one liquid fatty phase further comprises at least one volatile solvent chosen from hydrocarbon-based solvents and silicone solvents optionally comprising alkyl or alkoxy groups that are pendant or at the end of a silicone chain.

Claim 362 (new): The composition of claim 361, wherein the at least one volatile solvent is present in an amount up to 95.5% relative to the total weight of the composition.

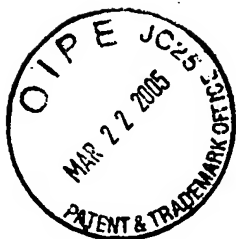
Claim 363 (new): The composition of claim 336, further comprising at least one oil-soluble cationic surfactant.

Claim 364 (new): The composition of claim 363, wherein the at least one oil-soluble cationic surfactant is chosen from quaternary ammonium compounds, fatty amines, and salts of fatty amines.

Claim 365 (new): The composition of claim 363, wherein the at least one oil-soluble cationic surfactant is present in a concentration ranging from 0.1% to 10% by weight, relative to the weight of the composition.

Claim 366 (new): The composition of claim 336, wherein the at least one liquid fatty phase is present in an amount ranging from 1% to 99% by weight relative to the total weight of the composition.

Claim 367 (new): The composition of claim 336, wherein the composition is a mascara.



PENDING CLAIMS  
Application No. 10/203,018  
Attorney Docket No. 05725.0816-01000  
Filed: August 5, 2002

Claims 1-121. (Canceled)

121. (Previously presented) The method of making up eyelashes according to claim 114, further comprising a liquid fatty phase structured by said at least one polymer.

122. (Previously presented) A method of making up eyelashes comprising applying to said eyelashes a mascara composition comprising:

- (i) at least one inert filler chosen from at least one of kaolin and PTFE;
- (ii) at least one polymer chosen from ethylenediamine/stearyl dimer tallate copolymer;
- (iii) water;
- (iv) at least one coloring agent; and
- (iii) at least one preservative.

123. (Canceled)

124. (Previously presented) The method of making up eyelashes according to claim 122, wherein the mascara composition further comprises silica.

125. (Previously presented) The method of making up eyelashes according to claim 122, further comprising at least one volatile solvent.

126. (Previously presented) The method of making up eyelashes according to claim 125, wherein said at least one volatile solvent is isododecane.

127. (Previously presented) The method of making up eyelashes according to claim 122, further comprising at least one neutralizing agent.

128. (Previously presented) The method of making up eyelashes according to claim 122, further comprising at least one vinylpyrrolidone polymer.

129. (Previously presented) The method of making up eyelashes according to claim 122, further comprising a liquid fatty phase structured by said at least one polymer.

130. (Previously presented) The method of making up eyelashes according to claim 114, wherein said at least one polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.





PENDING CLAIMS  
Application No. 10/787,440  
Attorney Docket No. 05725.0816-02000  
Filed: February 27, 2004

Claims 1-121. (Canceled)

122. A method of making a mascara comprising including in said mascara:

- (i) at least one inert filler chosen from kaolin and PTFE;
- (ii) at least one polymer chosen from ethylenediamine/stearyl dimer tallate copolymer;
- (iii) water;
- (iv) at least one coloring agent; and
- (v) at least one preservative.

Claim 123. (Canceled)

124. The method of making a mascara according to claim 122, further comprising including silica.

125. The method of making a mascara according to claim 122, further comprising including at least one volatile solvent.

126. The method of making a mascara according to claim 125, wherein said at least one volatile solvent is isododecane.

127. (Previously presented) The method of making a mascara according to claim 122, further comprising including at least one neutralizing agent.

Claim 128. (Canceled)

129. The method of making a mascara according to claim 122, further comprising including a liquid fatty phase structured by said at least one polymer.

Claims 130-137. (Canceled)

138. A method of making a mascara comprising mixing:

- (i) at least one inert filler chosen from kaolin and PTFE;
- (ii) at least one polymer chosen from ethylenediamine/stearyl dimer tallate copolymer;
- (iii) water;
- (iv) at least one coloring agent; and
- (v) at least one preservative.

139. (Canceled)

140. The method of making a mascara according to claim 138, further comprising mixing silica.

141. The method of making a mascara according to claim 138, further comprising mixing at least one volatile solvent.

142. The method of making a mascara according to claim 141, wherein said at least one volatile solvent is isododecane.

143. The method of making a mascara according to claim 138, further comprising mixing at least one neutralizing agent.

Claim 144. (Canceled)

145. The method of making a mascara according to claim 138, further comprising mixing a liquid fatty phase structured by said at least one polymer.

146. A method of making a mascara comprising including in said mascara:

- (i) at least one inert filler chosen from kaolin and PTFE;
- (ii) at least one polymer chosen from ethylenediamine/stearyl dimer dilinoleate copolymer;
- (iii) water;
- (iv) at least one coloring agent; and
- (v) at least one preservative.

147. A method of making a mascara comprising mixing:

- (i) at least one inert filler chosen from kaolin and PTFE;
- (ii) at least one polymer chosen from ethylenediamine/stearyl dimer

dilinoleate copolymer;

- (iii) water;
- (iv) at least one coloring agent; and
- (v) at least one preservative.

148. A method of making a mascara comprising including in said mascara:

- (i) at least one inert filler chosen from kaolin and PTFE;
- (ii) at least one polymer chosen from ethylenediamine/stearyl dimer tallate

copolymer and ethylenediamine/stearyl dimer dilinoleate copolymer;

- (iii) water; and
- (iv) at least one preservative.

Claims 149-150. (Canceled)

151. A method of making a mascara comprising mixing:

- (i) at least one inert filler chosen from kaolin and PTFE;
- (ii) at least one polymer chosen from ethylenediamine/stearyl dimer tallate

copolymer and ethylenediamine/stearyl dimer dilinoleate copolymer;

- (iii) water; and
- (iv) at least one preservative.

Claims 152-153. (Canceled)

154. A mascara product comprising:

- (i) a packaging article;
- (ii) a mascara composition comprising:
  - (a) at least one inert filler chosen from kaolin and PTFE;
  - (b) at least one polymer chosen from ethylenediamine/stearyl dimer tallate copolymer and ethylenediamine/stearyl dimer dilinoleate copolymer;
  - (c) water;
  - (d) at least one coloring agent; and
  - (e) at least one preservative; and
- (iii) an apparatus for applying said mascara to eyelashes.

Claims 155-156. (Canceled)

157. A mascara product comprising:

- (i) a packaging article;
- (ii) a mascara composition comprising:
  - (a) at least one inert filler chosen from kaolin and PTFE;
  - (b) at least one polymer chosen from ethylenediamine/stearyl dimer tallate copolymer and ethylenediamine/stearyl dimer dilinoleate copolymer;
  - (c) water; and

- (d) at least one preservative; and
- (iii) an apparatus for applying said mascara to eyelashes.

Claims 158-159. (Canceled)



PENDING CLAIMS  
Application No. 10/699,780  
Attorney Docket No. 05725.0895-02000  
Filing Date: November 4, 2003

1. A method for dispersing at least one coloring agent in a composition chosen from one or more of a mascara, an eyeliner, a foundation, a lipstick, a blusher, a make-up removing product, a make-up product for the body, an eyeshadow, a face powder, a concealer, a shampoo, a conditioner, an anti-sun product, a care product for skin, a care product for lips, and a care product for hair comprising including in said composition:

- (i) at least one coloring agent, and
- (ii) at least one heteropolymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom, wherein said at least one heteropolymer is included in said composition in an amount effective to disperse said at least one coloring agent.

2. The method according to claim 1, wherein said at least one heteropolymer further comprises at least one of:

at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least one linking group; and

at least one pendant fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one pendant fatty chain is bonded to said polymer skeleton via at least one linking group.

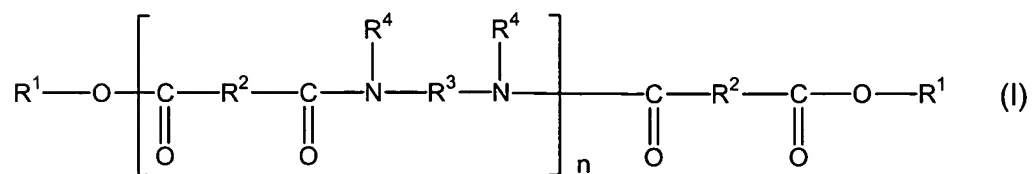
3. The method according to claim 2, wherein said alkyl chains and said alkenyl chains each comprise at least four carbon atoms.

4-5. (Canceled)

6. The method according to claim 2, wherein said at least one linking group is chosen from direct bonds, urea groups, urethane groups, thiourea groups, thiourethane groups, thioether groups, thioester groups, ester groups, ether groups, and amine groups.

7-27. (Canceled)

28. The method according to claim 1, wherein said at least one heteropolymer is chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of



the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;

- $R^1$ , which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;
- $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of all  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;
- $R^3$ , which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms, with the proviso that  $R^3$  comprises at least 2 carbon atoms; and
- $R^4$ , which are identical or different, are each chosen from hydrogen atoms,  $C_1$  to  $C_{10}$  alkyl groups and direct bonds to at least one group chosen from  $R^3$  and another  $R^4$  such that when said at least one group is chosen from another  $R^4$ , the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined in part by  $R^4$ -N- $R^3$ , with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen atoms.

29-39. (Canceled)

40. The method according to claim 1, wherein said at least one heteropolymer has a softening point greater than 50°C.

41-46. (Canceled)

47. The method according to claim 1, wherein said cosmetic composition further comprises at least one liquid fatty phase.

48-71. (Canceled)

72. The method according to claim 1, wherein said composition further comprises at least one polysaccharide resin.

73-74. (Canceled)

75. The method according to claim 1, wherein said composition further comprises at least one film former.

76-79. (Canceled)

80. The method according to claim 1, wherein said composition further comprises at least one fatty alcohol.

81-95. (Canceled)

96. A method of providing at least one property chosen from gloss and intense color to a composition chosen from one or more of a mascara, an eyeliner, a foundation, a lipstick, a blusher, a make-up removing product, a make-up product for

the body, an eyeshadow, a face powder, a concealer, a shampoo, a conditioner, an anti-sun product, a care product for skin, a care product for lips, and a care product for hair comprising including in said composition:

(i) at least one heteropolymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and

(ii) at least one coloring agent,

wherein said at least one heteropolymer is included in said composition in an amount effective to disperse said at least one coloring agent.

97. The method according to claim 96, wherein said at least one heteropolymer further comprises at least one of:

at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least one linking group; and

at least one pendant fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one pendant fatty chain is bonded to said polymer skeleton via at least one linking group.

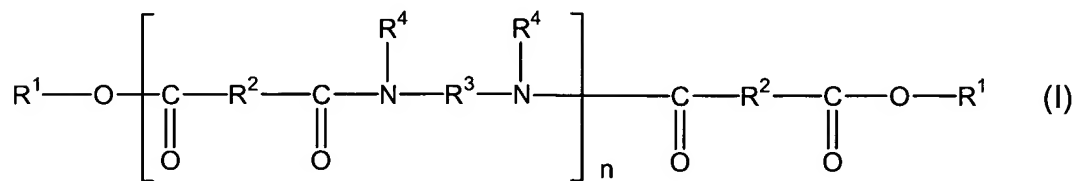
98. The method according to claim 97, wherein said alkyl chains and said alkenyl chains each comprise at least four carbon atoms.

99-100. (Canceled)

101. The method according to claim 97, wherein said at least one linking group is chosen from direct bonds, urea groups, urethane groups, thiourea groups, thiourethane groups, thioether groups, thioester groups, ester groups, ether groups, and amine groups.

102-122. (Canceled)

123. The method according to claim 96, wherein said at least one heteropolymer is chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;
- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;

- $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of all  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;
- $R^3$ , which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms, with the proviso that  $R^3$  comprises at least 2 carbon atoms; and
- $R^4$ , which are identical or different, are each chosen from hydrogen atoms,  $C_1$  to  $C_{10}$  alkyl groups and direct bonds to at least one group chosen from  $R^3$  and another  $R^4$  such that when said at least one group is chosen from another  $R^4$ , the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined in part by  $R^4-N-R^3$ , with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen atoms.

124-134. (Canceled)

135. The method according to claim 96, wherein said at least one heteropolymer has a softening point greater than  $50^{\circ}\text{C}$ .

136-141. (Canceled)

142. The method according to claim 96, wherein said composition further comprises at least one liquid fatty phase.

143-166. (Canceled)

167. The method according to claim 96, wherein said composition further comprises at least one polysaccharide resin.

168-169. (Canceled)

170. The method according to claim 96, wherein said composition further comprises at least one film former.

171-174. (Canceled)

175. The method according to claim 96, wherein said composition further comprises at least one fatty alcohol.

176-190. (Canceled)

191. The method according to claim 28, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

192. The method according to claim 123, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

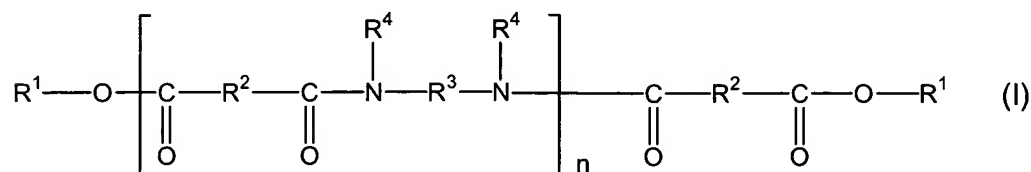
193. The method according to claim 28, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

194. The method according to claim 123, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

195. A method for dispersing at least one coloring agent in a cosmetic composition comprising including in said cosmetic composition

(i) at least one coloring agent, and

(ii) at least one heteropolymer chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;
- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;
- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of all R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- $R^3$ , which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms, with the proviso that  $R^3$  comprises at least 2 carbon atoms; and
- $R^4$ , which are identical or different, are each chosen from hydrogen atoms,  $C_1$  to  $C_{10}$  alkyl groups and direct bonds to at least one group chosen from  $R^3$  and another  $R^4$  such that when said at least one group is chosen from another  $R^4$ , the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined in part by  $R^4$ -N- $R^3$ , with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen atoms;

wherein the at least one heteropolymer is included in said cosmetic composition in an amount effective to disperse said at least one coloring agent.

196. The method according to claim 195, wherein said cosmetic composition further comprises at least one liquid fatty phase.

197. The method according to claim 195, wherein said cosmetic composition further comprises at least one polysaccharide resin.

198. The method according to claim 195, wherein said cosmetic composition further comprises at least one film former.

199. The method according to claim 195, wherein said cosmetic composition further comprises at least one fatty alcohol.



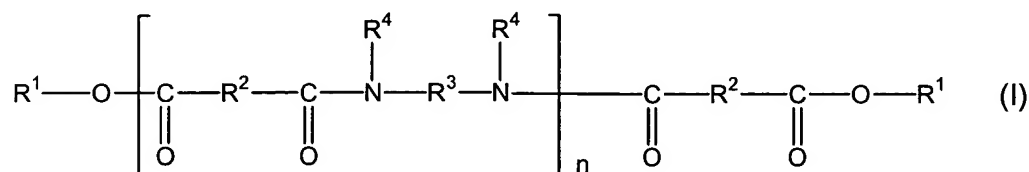
200. The method according to claim 195, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

201. The method according to claim 195, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

202. The method according to claim 195, wherein said cosmetic composition is a nail composition.

203. A method of providing at least one property chosen from gloss and intense color to a cosmetic composition, comprising including in said cosmetic composition:

(i) at least one heteropolymer chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;
- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;

-  $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of all  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$

hydrocarbon-based groups;

-  $R^3$ , which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms, with the proviso that  $R^3$  comprises at least 2 carbon atoms; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen atoms,  $C_1$  to  $C_{10}$  alkyl groups and direct bonds to at least one group chosen from  $R^3$  and another  $R^4$  such that when said at least one group is chosen from another  $R^4$ , the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined in part by  $R^4$ -N- $R^3$ , with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen atoms; and

(ii) at least one coloring agent,

wherein said at least one heteropolymer is included in said cosmetic composition in an amount effective to provide said at least one property chosen from gloss and intense color.

204. The method according to claim 203, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

205. The method according to claim 203, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

206. The method according to claim 203, wherein said cosmetic composition is a nail composition.

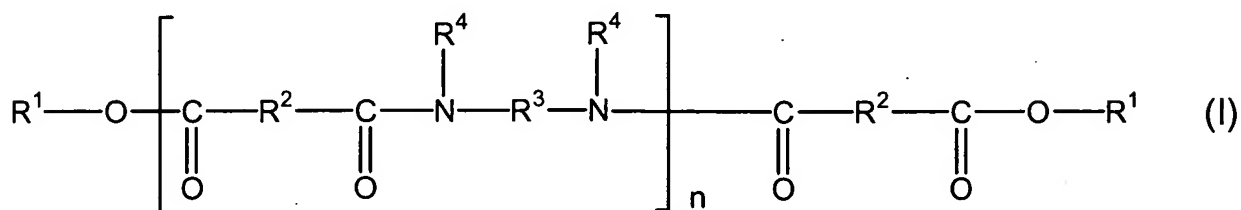


PENDING CLAIMS  
Application No. 10/198,931  
Attorney Docket No. 05725.0896-00000  
Filed: July 22, 2002

Claim 1 (previously presented): A composition comprising:

(i) at least one heteropolymer chosen from polyamide polymers of formula

(I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;

- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of all R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- R<sup>3</sup>, which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms

and nitrogen atoms, with the proviso that  $R^3$  comprises at least 2 carbon atoms;  
and

-  $R^4$ , which are identical or different, are each chosen from hydrogen atoms,  $C_1$  to  $C_{10}$  alkyl groups and a direct bond to at least one group chosen from  $R^3$  and another  $R^4$  such that when said at least one group is chosen from another  $R^4$ , the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined in part by  $R^4-N-R^3$ , with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen atoms;

(ii) fibers; and

(iii) at least one compound chosen from at least one polysaccharide resin and at least one copolymer film former chosen from di-block, tri-block, multi-block, and radial copolymers,

wherein said at least one heteropolymer is present in an amount effective to disperse said fibers.

Claims 2-18 (canceled).

Claim 19 (previously presented): The composition according to claim 1, wherein in said formula (I),  $n$  is an integer ranging from 1 to 5.

Claim 20 (original): The composition according to claim 1, further comprising at least one liquid fatty phase.

Claim 21 (original): The composition according to claim 20, wherein said at least one liquid fatty phase of the composition comprises at least one oil.

Claim 22 (original): The composition according to claim 21, wherein said at least one oil is chosen from at least one polar oil and at least one apolar oil.

Claim 23 (original): The composition according to claim 22, wherein said at least one polar oil is chosen from:

- hydrocarbon-based plant oils with a high content of triglycerides comprising fatty acid esters of glycerol in which the fatty acids comprise chains having from 4 to 24 carbon atoms, said chains optionally being chosen from linear and branched, and saturated and unsaturated chains;

- synthetic oils or esters of formula  $R_5COOR_6$  in which  $R_5$  is chosen from linear and branched fatty acid residues comprising from 1 to 40 carbon atoms and  $R_5 + R_6 \geq 10$ ;

- synthetic ethers comprising from 10 to 40 carbon atoms;

- $C_8$  to  $C_{26}$  fatty alcohols; and

- $C_8$  to  $C_{26}$  fatty acids.

Claim 24 (original): The composition according to claim 22, wherein said at least one apolar oil is chosen from:

- silicone oils chosen from volatile and non-volatile, linear and cyclic polydimethylsiloxanes that are liquid at room temperature;

- polydimethylsiloxanes comprising alkyl or alkoxy groups which are pendant and/or at the end of the silicone chain, the groups each comprising from 2 to 24 carbon atoms;

- phenylsilicones; and

- hydrocarbons chosen from linear and branched, volatile and non-volatile hydrocarbons of synthetic and mineral origin.

Claim 25 (original): The composition according to claim 20, wherein said at least one liquid fatty phase comprises at least one non-volatile oil.

Claim 26 (original): The composition according to claim 25, wherein said at least one non-volatile oil is chosen from hydrocarbon-based oils of mineral, plant and synthetic origin, synthetic esters and ethers, and silicone oils.

Claim 27 (original): The composition according to claim 26, wherein said at least one liquid fatty phase is present in an amount ranging from 1% to 99% by weight relative to the total weight of the composition.

Claim 28 (original): The composition according to claim 20, wherein said at least one liquid fatty phase comprises at least one volatile solvent chosen from hydrocarbon-based solvents and silicone solvents optionally comprising alkyl or alkoxy groups that are pendant or at the end of a silicone chain.

Claim 29 (original): The composition according to claim 1, wherein said fibers are chosen from natural and synthetic fibers.

Claim 30 (original): The composition according to claim 29, wherein said natural fibers are chosen from cotton, silk, wool, and other keratin fibers.

Claim 31 (currently amended): The composition according to claim 29, wherein said synthetic fibers are chosen from polyester, rayon, ~~[[nylon]]~~ nylon, and other polyamide fibers.

Claim 32 (currently amended): The composition according to claim ~~[[28]]~~ 29, wherein said fibers have an average length ranging from 0.5 mm to 4.0 mm.

Claim 33 (original): The composition according to claim 32, wherein said fibers have an average length ranging from 1.5 mm to 2.5 mm.

Claim 34 (original): The composition according to claim 1, wherein said fibers are present in the composition in an amount ranging from 0.5% to 10% relative to the total weight of the composition.

Claim 35 (previously presented): The composition according to claim 1, further comprising at least one film former different from said at least one compound chosen from at least one polysaccharide resin and at least one



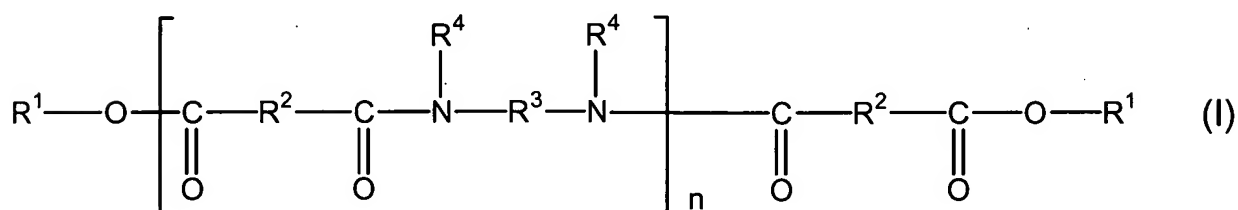
copolymer film former chosen from di-block, tri-block, multi-block, and radial copolymers.

Claim 36 (previously presented): The composition according to claim 1, wherein the composition is in a form chosen from a fluid gel, rigid gel, fluid single emulsion, rigid single emulsion, fluid multiple emulsion, and rigid multiple emulsion.

Claim 37 (previously presented): A composition comprising:

(i) at least one heteropolymer chosen from polyamide polymers of formula

(I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;

-  $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of all  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

-  $R^3$ , which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms, with the proviso that  $R^3$  comprises at least 2 carbon atoms; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen atoms,  $C_1$  to  $C_{10}$  alkyl groups and a direct bond to at least one group chosen from  $R^3$  and another  $R^4$  such that when said at least one group is chosen from another  $R^4$ , the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined in part by  $R^4-N-R^3$ , with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen;

(ii) fibers,

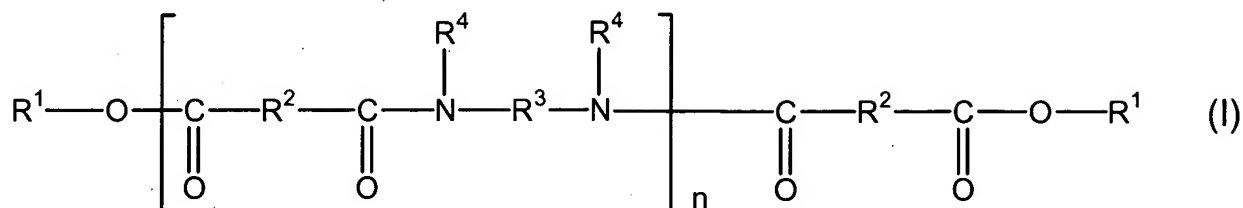
(iii) at least one polysaccharide resin, and

(iv) at least one copolymer film former chosen from di-block, tri-block, multi-block, and radial copolymers,

wherein said at least one heteropolymer is present in an amount effective to disperse said fibers.

Claim 38 (currently amended): A method for dispersing fibers in a cosmetic composition which comprises fibers comprising including in said cosmetic composition[[: (i)]] at least one heteropolymer chosen from polyamide

polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups comprising with at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;

- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of all R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- R<sup>3</sup>, which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms, with the proviso that R<sup>3</sup> comprises at least 2 carbon atoms; and

- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen atoms, and C<sub>1</sub> to C<sub>10</sub> alkyl groups and a direct bond to at least one group chosen from R<sup>3</sup> and another R<sup>4</sup> such that when said at least one group is chosen from

another  $R^4$ , the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined in part by  $R^4-N-R^3$ , with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen;

in an amount effective to disperse said fibers.

Claims 39-40 (canceled).

Claim 41 (original): The method according to claim 38, wherein said cosmetic composition further comprises at least one liquid fatty phase.

Claim 42 (original): The method according to claim 38, wherein said cosmetic composition further comprises at least one compound chosen from at least one polysaccharide resin and at least one copolymer film former chosen from di-block, tri-block, multi-block, and radial copolymers.

Claim 43 (previously presented): The composition according to claim 1, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

Claim 44 (previously presented): The composition according to claim 37, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

Claim 45 (previously presented): The method according to claim 38, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

Claim 46 (previously presented): The composition according to claim 1, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

Claim 47 (previously presented): The composition according to claim 37, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

Claim 48 (previously presented): The method according to claim 38, wherein the at least one heteropolymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.



ISSUED CLAIMS

Application No.: 09/937,314

U.S. Patent 6,869,594 B2

Attorney Docket No. 05725.0932-00000

Filed: September 24, 2001

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having hydrocarbon-aceous repeat units provided with at least one hetero-atom and b) optionally at least one optionally functionalized pendant and/or end fatty chain having from 12 to 120 carbon atoms which is bonded to these hydrocarbonaceous units, in a cosmetic composition or for the manufacture of a physiologically acceptable composition, for decreasing the transfer onto and/or the deposition on a substrate of traces of a film of said composition, applied to keratinous substances, brought into contact with said substrate and/or for increasing the hold of said film. In addition, this film is glossy and/or comfortable.

The invention is illustrated in more detail in the following examples. The percentages are given as percentage by mass.

## EXAMPLE 1

## Lipstick

Phase A	
Uniclear 100	18%
Castor oil	7%
Hydrogenated isoparaffin	4%
Isononyl isononanoate	4%
Phenyltrimethylsiloxytrisiloxane	8%
Vinylpyrrolidone/1-eicosene copolymer	2%
Phase B	
Pigments	10%
Hydrogenated isoparaffin	5%
Liquid lanolin	5%
Poly(12-hydroxystearic acid)	2%
Phase C	
Isododecane	25%
Decamethyltetrasiloxane	10%

The pigmentary phase (B) is milled using a triple roll mill and is introduced into the oily phase A, heated beforehand to 100° C., until the mixture is completely homogenous. The volatile phase C is subsequently added to the preceding mixture, which has been brought back to 85° C. The combined mixture is left in contact for 10 min and then cast in lipstick molds.

The lipstick obtained deposits a glossy and transfer-free film. This lipstick was considered by those testing to have a hold equal to and transfer-free and nonmigrating property or equivalent and to those of a transfer-free lipstick of the prior art, such as disclosed in Example 1 of document EP-A-847 752, but to be glossier than that of the prior art. This known lipstick contained:

PDMS (100 cSt)	8%
Hydrogenated polyisobutene	18%
Arachidyl propionate	7.5%
Polyethylene wax	16.5%
Pigments/pearlescent agents	11%
Isododecane	qsp 100%

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## EXAMPLE 2

## Lipstick

Phase A	
Uniclear 100	18%
Castor oil	8%
Hydrogenated isoparaffin	5%
Isononyl isononanoate	5%
Phenyltrimethylsiloxytrisiloxane	8%
Vinylpyrrolidone/1-eicosene copolymer	2%
Phase B	
Pigments	10%
Hydrogenated isoparaffin	5%
Liquid lanolin	5%
Poly(12-hydroxystearic acid)	2%
Phase C	
Isododecane	27%
Decamethyltetrasiloxane	5%

The pigmentary phase (B) is milled using a triple roll mill and is introduced into the oily phase A, heated beforehand to 100° C., until the mixture is completely homogenous. The volatile phase C is subsequently added to the preceding mixture, which has been brought back to 85° C. The combined mixture is left in contact for 10 min and then cast in lipstick molds.

The lipstick obtained deposits a glossy and transfer-free film. This lipstick was considered, by a panel of testers, to have a hold equal to and transfer-free and non-migration properties equivalent to those of a transfer-free lipstick of the prior art, in accordance with that of Example 1 of document EP-A-847 752, but to be glossier than that of the prior art.

What is claimed is:

1. A method for making up eyelashes comprising applying to said eyelashes a mascara comprising:

- (i) isododecane;
- (ii) at least one polymer chosen from ethylenediamine/stearyl dimer tallate copolymer;
- (iii) water;
- (iv) at least one coloring agent; and
- (v) at least one preservative.

2. A method for making up eyelashes comprising applying to said eyelashes a mascara comprising:

- (i) isododecane;
- (ii) at least one polymer chosen from ethylenediamine/stearyl dimer dilinoleate copolymer;
- (iii) water;
- (iv) at least one coloring agent; and
- (v) at least one preservative.

\* \* \* \* \*

ISSUED CLAIMS

Application No. 10/012,029 (Patent No. 6,835,399)

Attorney Docket No. 05725.1003-00000

Filed: December 11, 2001 (Issued December 28, 2004)



-continued

Polyamide resin with ester end groups, sold under the name "Uniclear ® 100" by the company Arizona Chemical	1 g
2-Amino-2-methyl-1,3-propanediol	0.8 g
Triethanolamine	2.4 g
Stearic acid	6.6 g
Hydroxyethylcellulose	0.8 g
Gum arabic	0.6 g
Ethyl acrylate/methyl methacrylate copolymer (80/20) as an aqueous dispersion containing 50% AM (Daitosol 5000 AD from Saito)	7 g AM
Black iron oxide	5 g
Preserving agents	qs
Water	qs 100 g

This mascara is easy to apply and adheres well to the eyelashes during and after application; the eyelashes are made up quickly. It also gives instantaneous loading of the eyelashes.

A mascara composition having the composition below was prepared:

Carnauba wax	4.6 g
Rice bran wax	2.1 g
Paraffin	2.2 g
Beeswax	8.2 g
Polyamide resin with ester end groups, sold under the name "Uniclear ® 100" by the company Arizona Chemical	1 g
Talc	1 g
Bentonite	5 g
Vinyl acetate/allyl stearate copolymer (65/35) (Mexomere PQ from Chimex)	6.5 g
Polyvinyl laurate (Mexomere PP from Chimex)	0.7 g
Sulphopolyester (AQ 55S from Eastman Chemical)	0.12 g
Isododecane	53.9 g
Propylene carbonate	1.6 g
Pigments	4.9 g
Preserving agents	qs
Water	qs 100 g

This is mascara adheres well to the eyelashes during and after application. It gives the eyelashes good instantaneous loading.

### EXAMPLE 3

#### a) Dispersion of Polymer in Isododecane Used:

A dispersion of non-crosslinked copolymer of methyl acrylate and of acrylic acid in a 95/5 ratio, in isododecane, was prepared according to the method of Example 7 of document EP-A-749 747. A dispersion is thus obtained of particles of poly(methyl acrylate/acrylic acid) surface-stabilized in isododecane with a polystyrene/copoly (ethylene-propylene) diblock block copolymer sold under the name Kraton G1701 (Shell), with a solids content of 24.2% by weight, a mean particle size of 180 nm and a Tg of 20° C. This copolymer can form a film at room temperature.

#### b) A Mascara Having the Composition Below was Prepared:

Carnauba wax	4.7 g
Rice bran wax	2.1 g
Paraffin	2.2 g
Beeswax	8.2 g

-continued

Polyamide resin with ester end groups, sold under the name "Uniclear ® 100" by the company Arizona Chemical	0.5 g
Dispersion of polymer in isododecane according to a)	10 g
Talc	1 g
Bentonite	5 g
Vinyl acetate/allyl stearate copolymer (65/35) (Mexomere PQ from Chimex)	6.5 g
Polyvinyl laurate (Mexomere PP from Chimex)	0.7 g
Propylene carbonate	1.6 g
Pigments	4.9 g
Preserving agents	qs
Isododecane	qs 100 g

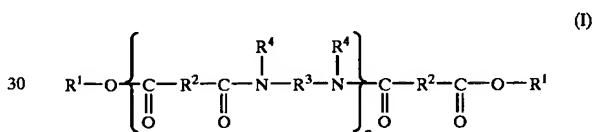
This mascara adheres well to the eyelashes during and after application. It gives the eyelashes good instantaneous loading.

What is claimed is:

#### 1. A method of lengthening eyelashes, comprising:

applying to the eyelashes, an effective amount of a mascara comprising a composition comprising, in a physiologically acceptable medium:

at least one first polymer of formula (I):



in which:

$n$  is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

$\text{R}^1$ , which are identical or different, are each chosen from alkyl groups with at least 4 carbon atoms and alkenyl groups with at least 4 carbon atoms;

$\text{R}^2$ , which are identical or different, are each chosen from  $\text{C}_4$  to  $\text{C}_{42}$  hydrocarbon-based groups with the proviso that at least 50% of  $\text{R}^2$  are chosen from  $\text{C}_{30}$  to  $\text{C}_{42}$  hydrocarbon-based groups;

$\text{R}^3$ , which are identical or different, are each chosen from  $\text{C}_2$  to  $\text{C}_{36}$  hydrocarbon-based group; and

$\text{R}^4$ , which are identical or different, are each chosen from hydrogen, and  $\text{C}_1$  to  $\text{C}_{10}$  alkyl groups, with the proviso that at least 50% of all  $\text{R}^4$  are chosen from hydrogen; and

a dispersion of particles of at least one second polymer that is film-forming and insoluble in said medium.

2. The method according to claim 1, wherein the at least one first polymer has a weight-average molecular mass ranging from 1,000 to 30,000.

3. The method according to claim 1, wherein the at least one first polymer is chosen from ethylene diamine/stearyl dimer tallate copolymer.

4. The method according to claim 1, wherein  $\text{R}^2$ , which are identical or different, are each chosen from  $\text{C}_{10}$  to  $\text{C}_{42}$  hydrocarbon-based groups.

PENDING CLAIMS  
Application No. 10/012,051  
Attorney Docket No. 05725.1004-00000  
Filed: December 11, 2001

Claims 1-142. (Cancelled)

143. A process for increasing the adhesion and/or expressly loading make-up on eyelashes, comprising applying to said eyelashes a mascara comprising:

(i) at least one polymer chosen from ethylenediamine/stearyl dimer tallate copolymer;

(ii) water;

(iii) at least one coloring agent; and

(iv) at least one preservative;

wherein said mascara comprises a fatty phase, and

further wherein said applying said mascara increases the adhesion and/or expressly loads said mascara on the eyelashes.

144. The process according to claim 143, wherein said mascara further comprises at least one second polymer that is film-forming and different than the at least one polymer.

145. (Cancelled)

146. The process according to claim 144, wherein said at least one second polymer is hydroxyethylcellulose.

147. The process according to claim 143, wherein said fatty phase comprises at least one hydrocarbon-based oil.

148. The process according to claim 147, wherein said at least one hydrocarbon-based oil is isododecane.

149. The process according to claim 143, wherein said fatty phase comprises at least one silicone oil.



PENDING CLAIMS  
Application No. 10/012,052  
Attorney Docket No. 05725.1005-00000  
Filed: December 11, 2001

1. - 131. (Canceled).

132. (New) A method for making up or caring for keratinous material comprising applying to said keratinous material a cosmetic composition comprising, in a physiologically acceptable aqueous medium:

- (i) at least one wax in the form of a wax-in-water emulsion, and
- (ii) at least one first polyamide polymer having a weight-average molecular mass of less than 100,000 and comprising a polymer backbone comprising hydrocarbonaceous repeating units, the hydrocarbonaceous repeating units comprising:
  - (a) at least one nonpendent amide unit in said backbone, and
  - (b) at least one fatty chain chosen from pendent fatty chains and terminal fatty chains, wherein the at least one fatty chain comprises from 8 to 120 carbon atoms, is bonded to the at least one nonpendent amide unit, and is optionally functionalized.

133. (New) The composition according to claim 132, wherein the at least one fatty chain is present in an amount ranging from 40 to 98% of the total number of the at least one nonpendent amide unit and the at least one fatty chain.

134. (New) The method according to claim 132, wherein the at least one fatty chain is chosen from pendent fatty chains and is bonded directly to a nitrogen atom of the at least one amide unit.

135. (New) The method according to claim 132, wherein the at least one fatty chain is chosen from terminal fatty chains bonded to the backbone via at least one bonding group.

136. (New) The method according to claim 132, wherein the at least one first polyamide polymer is present in an amount ranging from 0.01% to 10% by weight with respect to the total weight of the composition.

137. (New) The method according to claim 132, wherein the at least one first polymer chosen from ethylenediamine/stearyl dimer tallate copolymer.

138. (New) The method according to claim 132, wherein the at least one first polymer chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

139. (New) The method according to claim 132, wherein the at least one wax has a melting point ranging from greater than 30°C to 120°C.

140. (New) The method according to claim 132, wherein the at least one wax is chosen from beeswax, lanolin wax, Chinese insect wax, rice wax, carnauba wax, candelilla wax, ouricury wax, cork fiber wax, sugar cane wax, Japan wax and sumac wax, montan wax, microcrystalline waxes, paraffin waxes, ozokerites, ceresin wax, lignite wax, polyethylene waxes, waxes obtained by Fischer-Tropsch synthesis, fatty acid esters and glycerides that are solid at 40°C, waxes obtained by catalytic hydrogenation of animal or vegetable oils containing groups chosen from linear and branched C<sub>8</sub>-C<sub>32</sub> fatty chains, silicone waxes, and fluorinated waxes.

141. (New) The method according to claim 132, wherein the at least one wax has a hardness ranging from 0.05 MPa to 15 MPa.
142. (New) The method according to claim 132, wherein the at least one wax is dispersed in the form of particles having a mean size ranging from 50 nm to 3.5  $\mu\text{m}$ .
143. (New) The method according to claim 132, wherein the at least one wax is present in a content ranging from 0.1% to 50% by weight with respect to the total weight of the composition.
144. (New) The method according to claim 132, wherein the composition further comprises at least one film-forming polymer different than said first polyamide polymer.
145. (New) The method according to claim 144, wherein the at least one film-forming polymer is chosen from the group formed by vinyl polymers, polyurethanes, polyesters, polyamides, polyureas, and cellulose polymers.
146. (New) The method according to claim 144, wherein the at least one film-forming polymer is dissolved in the aqueous phase.
147. (New) The method according to claim 144, wherein the at least one film-forming polymer is in the form of particles in aqueous dispersion.
148. (New) The method according to claim 132, wherein the composition further comprises an emulsifying surfactant.

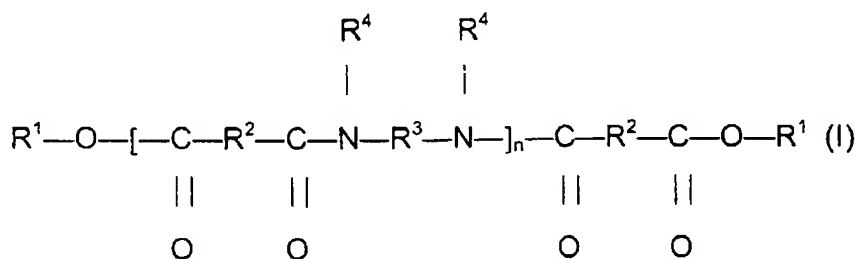
149. (New) The method according to claim 132, wherein the composition further comprises at least one organic solvent that is miscible with water.

150. (New) The method according to claim 132, wherein the composition further comprises at least one thickening agent.

151. (New) The method according to claim 132, wherein the composition further comprises at least one coloring material.

152. (New) The method according to claim 132, wherein the composition further comprises at least one additive chosen from antioxidants, fillers, preservatives, fragrances, neutralizing agents, cosmetic or dermatological active principles, and oils.

153. (New) The method according to claim 132, wherein the at least one first polymer is chosen from polymers of formula (I) below:



wherein:

n is a number of amide units such that the number of ester groups in formula (I) ranges from 10% to 50% of the total number of ester and amide groups;

$R^1$  is independently chosen from alkyl and alkenyl groups containing at least 4 carbon atoms;

$R^2$  is independently chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups, wherein 50% of the  $R^2$  groups are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;

$R^3$  is independently chosen from organic groups containing at least 2 carbon atoms, hydrogen, and optionally at least one atom chosen from oxygen and nitrogen atoms; and

$R^4$  is independently chosen from hydrogen,  $C_1$  to  $C_{10}$  alkyl groups, or a direct bond to  $R^3$  or to another  $R^4$ , such that the nitrogen atom to which  $R^3$  and  $R^4$  are both attached forms part of a heterocyclic structure defined by  $R^4-N-R^3$ , wherein at least 50% of the  $R^4$  groups are hydrogen.

154. (New) The method according to claim 153, wherein  $n$  is a whole number ranging from 1 to 5.

155. (New) The method according to claim 153, wherein  $R^1$  is independently chosen from  $C_{12}$  to  $C_{22}$  alkyl groups.

156. (New) The method according to claim 153, wherein  $R^2$  is independently chosen from  $C_{10}$  to  $C_{42}$  hydrocarbonaceous groups.

157. (New) The method according to claim 153, wherein  $R^3$  is independently chosen from  $C_2$  to  $C_{36}$  hydrocarbonaceous groups or polyoxyalkylated groups.

158. (New) The method according to claim 153, wherein  $R^4$  is a hydrogen atom.





**PENDING CLAIMS**  
**Application No. 10/047,987**  
**Attorney Docket No. 05725.1020-00000**  
**Filed: January 17, 2002**

1.-147. (Canceled)

148. (New) A composition comprising at least one liquid fatty phase which comprises at least one fluoro oil, wherein the at least one liquid fatty phase is structured with at least one structuring polymer with a weight-average molecular mass of less than or equal to 1,000,000, comprising:

a) a polymer skeleton having hydrocarbon-based repeating units containing at least one hetero atom, and

b) optionally at least one fatty chain chosen from at least one pendent fatty chain and at least one terminal fatty chain,

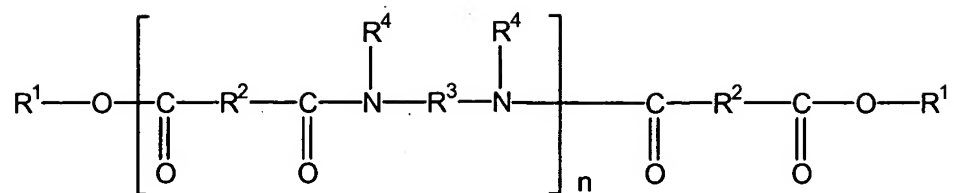
wherein the at least one fatty chain comprises from 6 to 120 carbon atoms, is linked to the hydrocarbon-based units, and is optionally functionalized, and

wherein the at least one liquid fatty phase and the at least one polymer form a physiologically acceptable medium.

149. (New) The composition according to claim 148, wherein the at least one hetero atom in the hydrocarbon-based repeating units of the polymer is a nitrogen atom.

150. (New) The composition according to claim 148, wherein the hydrocarbon-based repeating units are amide groups and said polymer skeleton is a polyamide skeleton.

151. (New) The composition according to claim 148, wherein said at least one structuring polymer is chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;

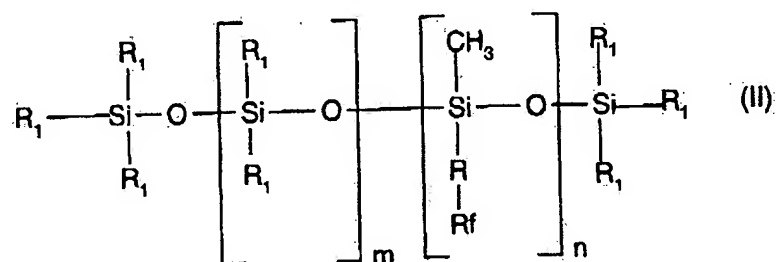
- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups, with the proviso that at least 50% of all R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- R<sup>3</sup>, which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms, with the proviso that R<sup>3</sup> comprises at least 2 carbon atoms; and

- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen atoms, C<sub>1</sub> to C<sub>10</sub> alkyl groups and a direct bond to at least one group chosen from R<sup>3</sup> and another R<sup>4</sup> such that when said at least one group is chosen from another R<sup>4</sup>, the nitrogen atom to which both R<sup>3</sup> and R<sup>4</sup> are bonded forms part of a heterocyclic structure defined in part by R<sup>4</sup>-N-R<sup>3</sup>, with the proviso that at least 50% of all R<sup>4</sup> are chosen from hydrogen atoms.

152. (New) The composition according to claim 148, wherein said at least one structuring polymer is present in the composition in an amount ranging from 0.5% to 80% by weight relative to the total weight of the composition.

153. (New) The composition according to Claim 148, wherein the at least one fluoro oil is chosen from fluorosilicone compounds of formula (II):



wherein:

R is chosen from linear and branched divalent alkyl groups containing from 1 to 6 carbon atoms;

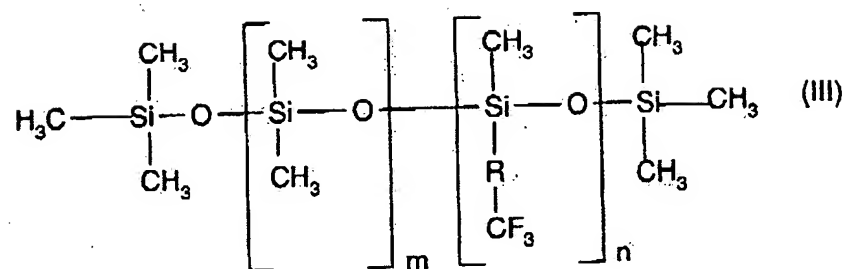
Rf is a fluoroalkyl radical containing from 1 to 9 carbon atoms;

R<sub>1</sub> is independently chosen from C<sub>1</sub>-C<sub>20</sub> alkyl radicals, hydroxyl radicals, and phenyl radicals;

m ranges from 0 to 150; and

n ranges from 1 to 300.

154. (New) The composition according to Claim 148, wherein the at least one fluoro oil is chosen from fluorosilicone compounds of formula (III) below:



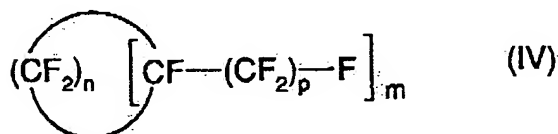
wherein:

R is chosen from divalent methyl, ethyl, propyl, and butyl groups;

m ranges from 0 to 80; and

n ranges from 1 to 30.

155. (New) The composition according to Claim 148, wherein the at least one fluoro oil is chosen from perfluorocycloalkyls of formula (IV):



wherein:

n is equal to 4 or 5;

m is equal to 1 or 2; and

p ranges from 1 to 3;

with the proviso that when  $m = 2$ , the  $(\text{CF}_2)_p-\text{F}$  groups are not necessarily alpha to each other.

156. (New) The composition according to Claim 148, wherein the at least one fluoro oil is chosen from fluoroalkyl and heterofluoroalkyl compounds of formula (V):



wherein:

t is 0 or 1;

n ranges from 0 to 3;

X is chosen from linear and branched divalent perfluoroalkyl radicals containing from 2 to 5 carbon atoms; and

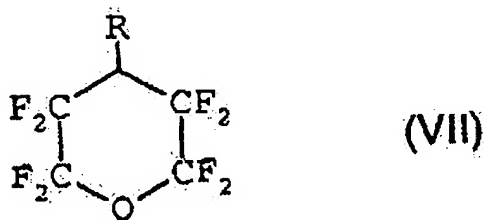
Z is chosen from O, S, NH,  $-(CH_2)_n-CH_3$ , wherein n is defined as above, and  $-(CF_2)_m-CF_3$ , wherein m ranges from 2 to 5.

157. (New) The composition according to Claim 148, wherein the at least one fluoro oil is chosen from perfluoroalkane compounds of formula (VI):



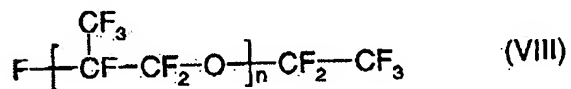
wherein n ranges from 2 to 6.

158. (New) The composition according to Claim 148, wherein the at least one fluoro oil is chosen from perfluoromorpholine derivatives of formula (VII):

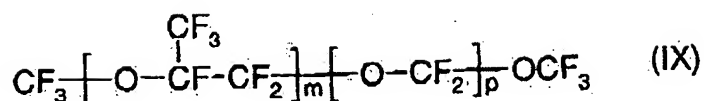


wherein R is chosen from  $C_1-C_4$  perfluoroalkyl radicals.

159. (New) The composition according to Claim 148, wherein the at least one fluoro oil is chosen from the perfluoropolyethers of formulae (VIII) and (IX):

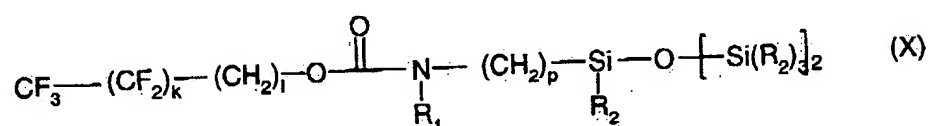


wherein n ranges from 7 to 30; and



wherein the ratio m/p ranges from 20 to 40, and the molecular weight ranges from 500 to 20,000.

160. (New) The composition according to Claim 148, wherein the at least one fluoro oil is chosen from fluorosilicone compounds of formula (X):



wherein:

k ranges from 1 to 17;

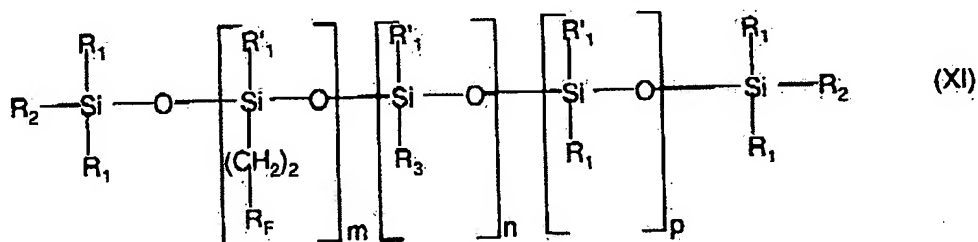
l ranges from 1 to 18;

p ranges from 1 to 6;

R<sub>1</sub> is chosen from hydrogen and C<sub>1</sub>-C<sub>6</sub> alkyl radicals;

R<sub>2</sub> is chosen from C<sub>1</sub>-C<sub>6</sub> alkyl radicals and -OSi(R<sub>3</sub>)<sub>3</sub>, R<sub>3</sub> being chosen from C<sub>1</sub>-C<sub>4</sub> alkyl radicals.

161. (New) The composition according to Claim 148, wherein the at least one fluoro oil is chosen from fluoroalkylsilicones of formula (XI):



wherein:

$R_1$  and  $R'_1$  are independently chosen from linear and branched alkyl radicals containing from 1 to 6 carbon atoms, and phenyl radicals;

$R_2$  is chosen from  $R_1$ ,  $-OH$ , and  $-(CH_2)_f-R_F$ ,  $f$  being an integer ranging from 0 to 10;

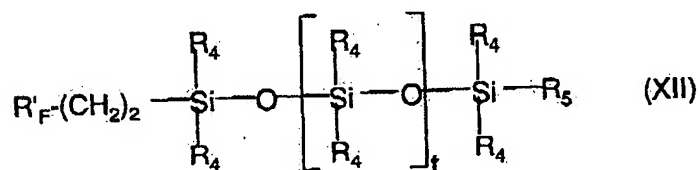
$R_3$  is chosen from linear and branched alkyl radicals containing from 6 to 22 carbon atoms;

$R_F$  is chosen from  $-(CF_2)_q-CF_3$ ,  $q$  being an integer ranging from 0 to 10;

$m$  and  $n$  are independently chosen from an integer ranging from 1 to 50; and

$p$  is an integer ranging from 0 to 2,000.

162. (New) The composition according to Claim 148, wherein the at least one fluoro oil is chosen from fluoroalkylsilicones of formula (XII):



wherein:

$R_4$  is chosen from linear and branched alkyl radicals containing from 1 to 6 carbon atoms, and phenyl radicals;

$R_5$  is chosen from linear and branched alkyl radicals containing from 6 to 22 carbon atoms, and phenyl radicals;

$R'_F$  is chosen from  $-(CF_2)_s-CF_3$ , wherein  $s$  is an integer ranging from 0 to 15; and

$t$  is an integer ranging from 1 to 2,000.

163. (New) The composition according to Claim 148, wherein the at least one fluoro oil is present in an amount ranging from 0.1% to 50% by weight, relative to the total weight of the composition.

164. (New) The composition according to Claim 148, further comprising at least one additional oil, other than the said at least one fluoro oil.

165. (New) The composition according to claim 148, wherein said at least one liquid fatty phase further comprises one additional non-volatile oil, other than said fluoro oil.

166. (New) The composition according to claim 148, further comprising at least one volatile solvent.

167. (New) The composition according to Claim 148, wherein the at least one liquid fatty phase further comprises an apolar oil.

168. (New) The composition according to Claim 148, wherein the at least one liquid fatty phase is present in an amount ranging from 5% to 99% by weight, relative to the total weight of the composition.

169. (New) The composition according to Claim 148, further comprising at least one dyestuff.

170. (New) The composition according to Claim 148, further comprising at least one additive chosen from water, antioxidants, essential oils, preserving agents, fragrances, fillers, waxes, fatty compounds that are pasty at room temperature, neutralizers, polymers that are liposoluble or dispersible in the physiologically acceptable medium, cosmetic agents, dermatological active agents, and dispersants.



171. (New) The composition according to claim 148, wherein the composition is in the form of a rigid gel or stick.

172. (New) The composition according to claim 148, wherein the composition is a cosmetic composition chosen from mascara, eyeliner, a foundation, a lipstick, a blusher, a deodorant product, a make-up-removing product, a body make-up product, an eye shadow, a face powder, a concealer product, a shampoo, a conditioner, an antisen product, a bodycare product, a facial care product, or a nail varnish.

173. (New) A process for caring for, making up, or treating a keratin material, comprising the application to the keratin material of a cosmetic composition comprising at least one liquid fatty phase which comprises at least one fluoro oil, wherein the at least one liquid fatty phase is structured with at least one structuring polymer with a weight-average molecular mass of less than or equal to 1,000,000, comprising:

a) a polymer skeleton having hydrocarbon-based repeating units containing at least one hetero atom, and

b) optionally at least one fatty chain chosen from at least one pendent fatty chain and at least one terminal fatty chain,

wherein the at least one fatty chain comprises from 6 to 120 carbon atoms, is linked to the hydrocarbon-based units, and is optionally functionalized, and

wherein the at least one liquid fatty phase and the at least one polymer form a physiologically acceptable medium.



PENDING CLAIMS  
Application No. 10/746,612  
Attorney Docket No. 05725.1338-01000  
Filed: December 22, 2003

Claim 1: A cosmetic composition, comprising: at least one structuring agent comprising a polymer skeleton having a hydrocarbon-based repeating unit comprising at least one hetero atom; at least one liquid fatty phase; a silicone elastomer powder comprising a silicone elastomer core coated with a silicone resin; and at least one swelling agent for said powder.

Claim 2: The cosmetic composition of claim 1, wherein said at least one structuring agent further comprises at least one fatty chain bonded to said polymer skeleton.

Claim 3: The cosmetic composition of claim 2, wherein said at least one fatty chain is a pendant chain.

Claim 4: The cosmetic composition of claim 2, wherein said at least one fatty chain is a terminal chain.

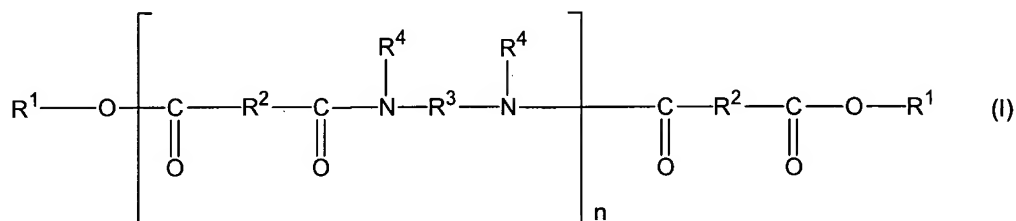
Claim 5: The cosmetic composition of claim 4, wherein said at least one fatty chain is bonded to said polymer skeleton via an ester group.

Claim 6: The cosmetic composition of claim 2, wherein said at least one structuring agent comprises a plurality of fatty chains, including a terminal fatty chain.

Claim 7: The cosmetic composition of claim 2, wherein said at least one fatty chain is functionalized.

Claim 8: The cosmetic composition of claim 1, wherein said polymer skeleton is a polyamide.

Claim 9: The cosmetic composition of claim 8, wherein said at least one structuring agent is chosen from polyamide polymers of formula (I):



wherein:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;
- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;
- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of all R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;
- R<sup>3</sup>, which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms, with the proviso that R<sup>3</sup> comprises at least 2 carbon atoms; and
- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen atoms, C<sub>1</sub> to C<sub>10</sub> alkyl groups and a direct bond to at least one group chosen from R<sup>3</sup> and another R<sup>4</sup> such that when said at least one group is chosen from another R<sup>4</sup>, the nitrogen atom to which both R<sup>3</sup> and R<sup>4</sup> are bonded forms part of a heterocyclic structure defined in part by R<sup>4</sup>-N-R<sup>3</sup>, with the proviso that at least 50% of all R<sup>4</sup> are chosen from hydrogen atoms.

Claim 10: The cosmetic composition of claim 1, wherein said at least one swelling agent is chosen from linear and cyclic polydimethylsiloxanes.

Claim 11: The cosmetic composition of claim 10, wherein said cyclic polydimethylsiloxanes are chosen from cyclomethicones.

Claim 12: The cosmetic composition of claim 10, wherein said linear polydimethylsiloxanes are chosen from dimethicones.

Claim 13: The cosmetic composition of claim 1, wherein said at least one swelling agent is chosen from phenylmethicones.

Claim 14: The cosmetic composition of claim 1, wherein said at least one swelling agent is chosen from fluorinated silicones.

Claim 15: The cosmetic composition of claim 1, wherein said silicone resin comprises a polyorganosilsesquioxane.

Claim 16: The cosmetic composition of claim 1, wherein said silicone elastomer core is unfunctionalized.

Claim 17: The cosmetic composition of claim 1, wherein said silicone elastomer core contains pendant functional groups.

Claim 18: The cosmetic composition of claim 17, wherein said functional groups comprise fluoroalkyl groups.

Claim 19: The cosmetic composition of claim 17, wherein said functional groups comprise phenyl groups.

Claim 20: The cosmetic composition of claim 1, wherein said at least one structuring agent comprises a polyamide bonded to a fatty chain via an ester group, said at least one swelling agent is chosen from dimethicones, and said silicone resin comprises a polyorganosilsesquioxane.

Claim 21: The cosmetic composition of claim 1, wherein said at least one liquid fatty phase is chosen from polar oils, apolar oils, and mixtures thereof.

Claim 22: The cosmetic composition of claim 1, which is in the form of an emulsion.

Claim 23: The cosmetic composition of claim 22, further comprising an aqueous phase.

Claim 24: The cosmetic composition of claim 22, which is anhydrous.

Claim 25: The cosmetic composition of claim 1, further comprising at least one film-forming agent.

Claim 26: The cosmetic composition of claim 1, further comprising at least one wax.

Claim 27: The cosmetic composition of claim 1, further comprising at least one sunscreen agent.

Claim 28: The cosmetic composition of claim 1, further comprising at least one emulsifier.

Claim 29: The cosmetic composition of claim 1, further comprising at least one plasticizer.

Claim 30: The cosmetic composition of claim 1, further comprising at least one additive.

Claim 31: The cosmetic composition of claim 30, wherein the at least one additive is at least one pigment.

Claim 32: The cosmetic composition of claim 31, wherein said at least one pigment is treated.

Claim 33: The cosmetic composition of claim 31, wherein said at least one pigment is treated with an amino acid.

Claim 34: The cosmetic composition of claim 1, which is in the form of a solid, a paste, a gel or a cream.

Claim 35: The cosmetic composition of claim 1, which is in a molded form.

Claim 36: The cosmetic composition of claim 1, which is in the form of a stick or dish.

Claim 37: The cosmetic composition of claim 1, which is in the form of a powder.

Claim 38: A composition useful in the preparation of a cosmetic, comprising: at least one a structuring agent comprising a polymer skeleton comprising a hydrocarbon-based repeating unit containing at least one hetero atom, and a silicone elastomer powder comprising a silicone elastomer core coated with a silicone resin.

Claim 39: The composition of claim 38, wherein said at least one structuring agent further comprises at least one fatty chain bonded to said polymer skeleton.

Claim 40: The composition of claim 39, wherein said at least one fatty chain is a pendant chain.

Claim 41: The composition of claim 39, wherein said at least one fatty chain is a terminal chain.

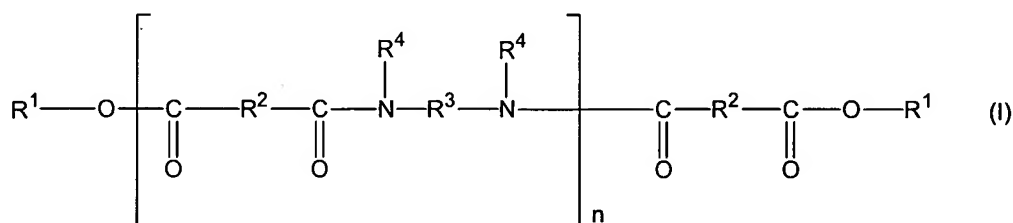
Claim 42: The composition of claim 41, wherein said at least one fatty chain is bonded to said polymer skeleton via an ester group.

Claim 43: The composition of claim 38, wherein said at least one structuring agent comprises a plurality of fatty chains, including a terminal fatty chain.

Claim 44: The composition of claim 38, wherein said at least one fatty chain is functionalized.

Claim 45: The composition of claim 38, wherein said polymer skeleton is a polyamide.

Claim 46: The composition of claim 45, wherein said at least one structuring agent is chosen from polyamide polymers of formula (I):



wherein:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;

- $R^1$ , which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;
- $R^2$ , which are identical or different, are each chosen from  $C_4$  to  $C_{42}$  hydrocarbon-based groups with the proviso that at least 50% of all  $R^2$  are chosen from  $C_{30}$  to  $C_{42}$  hydrocarbon-based groups;
- $R^3$ , which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms, with the proviso that  $R^3$  comprises at least 2 carbon atoms; and
- $R^4$ , which are identical or different, are each chosen from hydrogen atoms,  $C_1$  to  $C_{10}$  alkyl groups and a direct bond to at least one group chosen from  $R^3$  and another  $R^4$  such that when said at least one group is chosen from another  $R^4$ , the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined in part by  $R^4-N-R^3$ , with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen atoms.

Claim 47: A method for care, make-up or treatment of a keratin material, comprising applying to the keratin material a composition comprising: at least one structuring agent comprising a polymer skeleton having a hydrocarbon-based repeating unit comprising at least one hetero atom; at least one liquid fatty phase; a silicone elastomer powder comprising a silicone elastomer core coated with a silicone resin; and at least one swelling agent for the powder.

Claim 48: The method of claim 47, wherein the keratin material comprises lips.

Claim 49: The method of claim 47, wherein the keratin material comprises skin.

Claim 50: The method of claim 47, wherein the keratin material comprises keratinous fibers.



Claim 51: The method of claim 47, wherein the at least one structuring agent is chosen from a polyamide bonded to a fatty chain via an ester group, the at least one swelling agent is chosen from dimethicones, and the silicone resin comprises a polyorganosilsesquioxane.

Claim 52 (canceled).

Claim 53: The cosmetic composition of claim 1, wherein the at least one structuring agent is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

Claim 54: The cosmetic composition of claim 1, wherein the at least one structuring agent is chosen from ethylenediamine/stearyl dimer tallate copolymer.

Claim 55: The composition of claim 38, wherein the at least one structuring agent is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

Claim 56: The composition of claim 38, wherein the at least one structuring agent is chosen from ethylenediamine/stearyl dimer tallate copolymer.

Claim 57: The method of claim 47, wherein the at least one structuring agent is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

Claim 58: The method of claim 47, wherein the at least one structuring agent is chosen from ethylenediamine/stearyl dimer tallate copolymer.



PENDING CLAIMS  
Application No. 10/203,374  
Attorney Docket No. 06028.0019-00000  
Filed: August 9, 2002

Claims 1-16 (canceled).

Claim 17 (previously presented): A process for making a colored make-up cosmetic composition which produces a transparent or translucent colored coat on at least one of the skin, lips and superficial body growths, comprising the following successive steps:

- (1) selecting a cosmetically acceptable base having at least one of bulk opaqueness, translucency and transparency,
- (2) preparing at least one series of samples of the cosmetic base, each series comprising increasing amounts of a coloring agent dissolved or dispersed in the cosmetically acceptable base,
- (3) spreading each of the samples of the at least one series over a transparent slide having a recess with a depth of 10  $\mu\text{m}$ ,
- (4) measuring, for each of the samples of the at least one series, the transmission of the layer thus formed at a wavelength corresponding to the maximum of the absorption or scattering peak ( $\lambda_{\text{max}}$ ) of the coloring agent,
- (5) drawing a calibration curve by plotting the values of the transmission at  $\lambda_{\text{max}}$  as a function of the concentration of the coloring agent,
- (6) selecting, from the calibration curve thus obtained, a concentration of the coloring agent corresponding to a transmission at  $\lambda_{\text{max}}$  ranging from 20% to 80%, and

(7) incorporating the at least one coloring agent from the at least one series, at the concentration selected in step (6), in a cosmetic base in the liquid state and identical to or different from that used in step (1).

Claim 18 (previously presented): The process according to claim 17, wherein, in step (6), the concentration of the coloring agent corresponding to a transmission at  $\lambda_{\max}$  ranging from 25% to 80% is selected from the calibration curve.

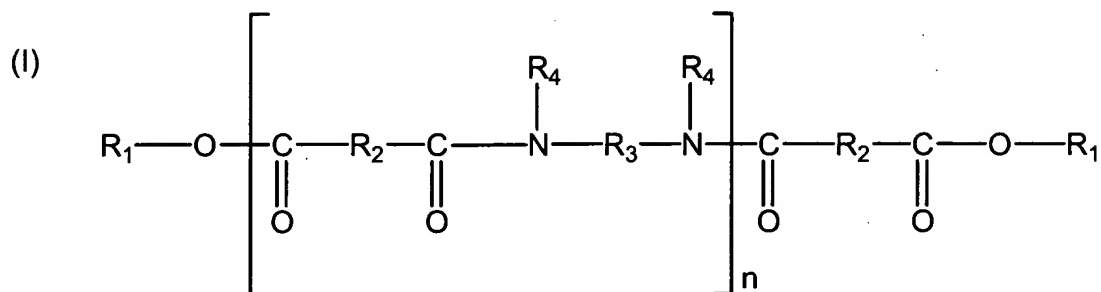
Claim 19 (previously presented): The process according to claim 17, wherein the cosmetically acceptable base is a substantially colorless base.

Claim 20 (previously presented): The process according to claim 17, wherein the cosmetically acceptable base is chosen from aqueous gels and oily gels.

Claim 21 (previously presented): The process according to claim 20, wherein the gel is in stick form.

Claim 22 (previously presented): The process according to claim 17, wherein the cosmetically acceptable base is an anhydrous gel formed from a fatty phase which is liquid at ambient temperature comprising an oil chosen from polar oils and nonpolar oils, wherein the fatty phase is structured by a gelling agent for fatty phases which is chosen from at least one of hydrophobic pyrogenic silicas, gelling polyamides, hydrophobic galactomannans, waxes, and modified clays.

Claim 23 (previously presented): The process according to claim 22, wherein the gelling polyamide corresponds to the formula (I):



in which n represents a whole number such that the number of ester groups ranges from 10% to 50% of the total number of the ester and amide groups;

R<sub>1</sub>, which may be identical or different, represents a group chosen from alkyls having at least 4 carbon atoms and alkenyls having at least 4 carbon atoms;

R<sub>2</sub>, which may be identical or different, represents a C<sub>4</sub> to C<sub>42</sub> hydrocarbonaceous group, provided that 50% of the R<sub>2</sub> groups represent a C<sub>30</sub> to C<sub>42</sub> hydrocarbonaceous group;

R<sub>3</sub>, which may be identical or different, represents an organic group having at least 2 carbon atoms, hydrogen atoms, and optionally at least one atom chosen from oxygen atoms and nitrogen atoms; and

R<sub>4</sub>, which may be identical or different, represents a group chosen from hydrogen atoms, C<sub>1</sub> to C<sub>10</sub> alkyls, optionally directly bonded to R<sub>3</sub> or to another R<sub>4</sub>, so that the nitrogen atom to which both R<sub>3</sub> and R<sub>4</sub> are bonded forms part of a heterocyclic structure defined by R<sub>4</sub>-N-R<sub>3</sub>, with at least 50% of the R<sub>4</sub> groups representing a hydrogen atom.

Claim 24 (previously presented): The process according to claim 23, wherein each  $R_1$ , which may be identical or different, is chosen from alkyls having 4 to 24 carbon atoms and alkenyls having 4 to 24 carbon atoms.

Claim 25 (previously presented): The process according to claim 22, wherein the modified clay is a hectorite modified by a  $C_{12}$ - $C_{22}$  fatty acid ammonium chloride.

Claim 26 (previously presented): The process according to claim 17, wherein the coloring agent is chosen from at least one of water-soluble dyes, fat soluble dyes, pigments, pearlescence agents, and lakes.

Claim 27 (previously presented): The process according to claim 26, wherein the water-soluble dye is chosen from at least one of fuchsin, extracts of sorghum, *Pterocarpus soyauxii*, *Monascus*, *Lawsonia inermis*, *Mercurialis perenis*, *Helianthus aanus*, *Impatiens balsamina*, *Curcuma longa*, *Phytolacca decandra*, *Solidago aureus*, *Juglans regia*, *Iris germanica*, *Alkanna tinctoria*, *Chrozophoro tinctoria*, and *Isatis tinctoria*.

Claim 28 (previously presented): The process according to claim 26, wherein the fat-soluble dye is chosen from at least one of Sudan red III, lutein, quinizarin green, alizural purple SS, carotenoid derivatives, annatto derivatives, and fuchsin derivatives.

Claim 29 (previously presented): The process according to claim 28, wherein the carotenoid derivative is chosen from lycopene,  $\beta$ -carotene, bixin, and capsantein.

Claim 30 (previously presented): The process according to claim 26, wherein the pigment is chosen from at least one of white inorganic pigments, colored inorganic pigments, white coated inorganic pigments, white organic pigments, colored coated inorganic pigments, and colored organic pigments.

Claim 31 (canceled).

Claim 32 (previously presented): The process according to claim 26, wherein the pearlescence agent is chosen from mica covered with at least one of titanium oxide and bismuth oxychloride and titanium oxide-coated mica covered with at least one of iron oxide, ferric blue, chromium oxide, and precipitated organic pigments.

Claim 33 (previously presented): The process according to claim 26, wherein the lake is chosen from at least one of lakes based on cochineal carmine, lakes based on at least one of calcium salts, barium salts, aluminum salts, strontium salts, and zirconium salts, and lakes based on acid dyes.

Claim 34 (previously presented): The process according to claim 17, wherein the process comprises, between steps (3) and (4), an additional step comprising leveling the excess of the sample so as to obtain a layer with a homogenous thickness of 10  $\mu\text{m}$ .

Claim 35 (previously presented): The process according to claim 17, wherein the transparent slide is a quartz slide.

Claim 36 (previously presented): A colored make-up cosmetic composition with controlled transmission prepared according to a process comprising the following successive steps:

- (1) selecting a cosmetically acceptable base having at least one of bulk opaqueness, translucency and transparency,
- (2) preparing at least one series of samples of the cosmetic base, each series comprising increasing amounts of a coloring agent dissolved or dispersed in the cosmetically acceptable base,
- (3) spreading each of the samples of the at least one series over a transparent slide having a recess with a depth of 10  $\mu\text{m}$ ,
- (4) measuring, for each of the samples of the at least one series, the transmission of the layer thus formed at a wavelength corresponding to the maximum of the absorption or scattering peak ( $\lambda_{\text{max}}$ ) of the coloring agent,
- (5) drawing a calibration curve by plotting the values of the transmission at  $\lambda_{\text{max}}$  as a function of the concentration of the coloring agent,
- (6) selecting, from the calibration curve thus obtained, a concentration of the coloring agent corresponding to a transmission at  $\lambda_{\text{max}}$  ranging from 20% to 80%, and
- (7) incorporating at least one second coloring agent from the at least one series, at the concentration selected in step (6), in a second cosmetic base in a liquid state identical to or different from that used in step (1).

Claim 37 (previously presented): The process according to claim 30, wherein the pigment is chosen from at least one of titanium dioxide, zirconium dioxide, cerium dioxide, zinc oxide, iron oxide, chromium oxide, ferric blue, chromium hydrate, carbon black, ultramarines, manganese violet, manganese pyrophosphate, and metal powders.

Claim 38 (previously presented): The process according to claim 37, wherein the metal powder is chosen from silver powders and aluminum powders.



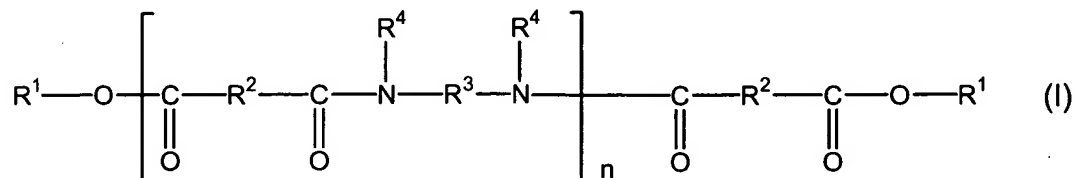


PENDING CLAIMS  
Application No. 10/918,579  
Attorney Docket No. 05725.0808-02000  
Filed: August 16, 2004

1-299. (Canceled).

300. (Previously presented) A method for providing stability to a cosmetic composition comprising including in said cosmetic composition at least one liquid fatty phase which comprises:

(i) at least one structuring polymer chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups having at least 4 carbon atoms and alkenyl groups having at least 4 carbon atoms;

- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- R<sup>3</sup>, which are identical or different, are each chosen from C<sub>2</sub> to C<sub>36</sub> hydrocarbon-based groups; and

-  $R^4$ , which are identical or different, are each chosen from hydrogen and  $C_1$  to  $C_{10}$  alkyl groups, with the proviso that at least 50% of all  $R^4$  are chosen from hydrogen;

(ii) at least one oil-soluble ester comprising at least one free hydroxy group with the proviso that said at least one oil-soluble ester is not castor oil; and

(iii) at least one coloring agent.

301. (Previously presented) The method according to claim 300, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

302. (Previously presented) The method according to claim 300, wherein said composition further comprises at least one additional fatty material.

303. (Previously presented) The method according to claim 302, wherein said at least one additional fatty material is chosen from gums, fatty materials pasty at ambient temperature, and resins.

304. (Previously presented) The method according to claim 300, wherein said composition further comprises at least one fatty alcohol.

305. (Previously presented) The method according to claim 304, wherein said at least one fatty alcohol is chosen from  $C_8$  to  $C_{26}$  fatty alcohols.

306. (Previously presented) The method according to claim 305, wherein said at least one fatty alcohol is chosen from  $C_{12}$  to  $C_{20}$  fatty alcohols.

307. (Previously presented) The method according to claim 306, wherein said  $C_{12}$  to  $C_{20}$  fatty alcohols are chosen from myristyl alcohol, cetyl alcohol, stearyl alcohol and behenyl alcohol.

308. (Previously presented) The method according to claim 304, wherein the at least one fatty alcohol is present in a concentration ranging from 0.1% to 15.0% by weight, relative to the weight of the composition.

309. (Previously presented) The method according to claim 308, wherein the at least one fatty alcohol is present in a concentration ranging from 0.5% to 10.0% by weight, relative to the weight of the composition.

310. (Previously presented) The method according to claim 309 wherein the at least one fatty alcohol is present in a concentration ranging from 0.5% to 8.0% by weight, relative to the weight of the composition.

311. (Previously presented) The method according to claim 300, wherein said composition further comprises at least one oil-soluble polymer.

312. (Previously presented) The method according to claim 311, wherein said at least one oil-soluble polymer is chosen from alkylated guar gums and alkyl celluloses.

313. (Previously presented) The method according to claim 311, wherein the at least one oil-soluble polymer is present in a concentration ranging from 0.05% to 10% by weight, relative to the weight of the composition.

314. (Previously presented) The method according to claim 313, wherein the at least one oil-soluble polymer is present in a concentration ranging from 0.1% to 5% by weight, relative to the weight of the composition.

315. (Previously presented) The method according to claim 314 wherein the at least one oil-soluble polymer is present in a concentration ranging from 0.1% to 3% by weight, relative to the weight of the composition.

316. (Previously presented) The method according to claim 300, wherein said composition further comprises at least one wax.

317. (Previously presented) The method according to claim 316, wherein said at least one wax is chosen from carnauba wax, candelilla wax, ouricury wax, Japan wax, cork fiber wax, sugar cane wax, paraffin waxes, lignite wax, microcrystalline waxes, lanolin wax, montan wax, polyethylene waxes, waxes obtained by Fischer-Tropsch synthesis, silicone waxes, ozokerites, hydrogenated jojoba oil, fatty acid esters, and fatty acid ester glycerides.

318. (Previously presented) The method according to claim 316, wherein said at least one wax is present at a concentration of up to 3% relative to the total weight of said composition.

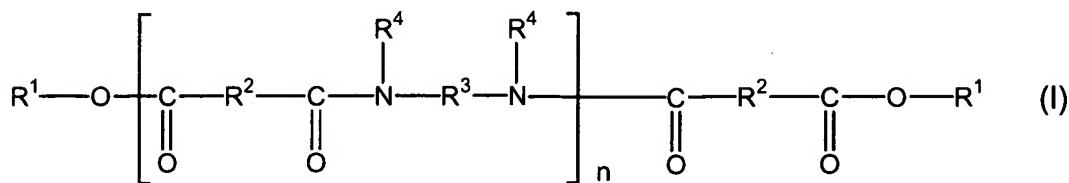
319. (Previously presented) The method according to claim 300, wherein the composition further comprises at least one preserving agent chosen from methylparaben, ethylparaben, propylparaben, and butylparaben.

320. (Previously presented) The method according to claim 300, wherein the at least one structuring polymer is chosen from ethylenediamine/stearyl dimer dilinoleate copolymer.

321. (Previously presented) A container comprising a lipstick composition comprising:

(i) at least one structuring polymer chosen from polyamide polymers of formula

(I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one structuring polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one structuring polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups having at least 4 carbon atoms and alkenyl groups having at least 4 carbon atoms;

- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- R<sup>3</sup>, which are identical or different, are each chosen from C<sub>2</sub> to C<sub>36</sub> hydrocarbon-based groups; and

- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen and C<sub>1</sub> to C<sub>10</sub> alkyl groups, with the proviso that at least 50% of all R<sup>4</sup> are chosen from hydrogen;

(ii) at least one oil-soluble ester comprising at least one free hydroxy group with the proviso that said at least one oil-soluble ester is not castor oil; and

(iii) at least one coloring agent.



PENDING CLAIMS  
Application No. 10/933,431  
Attorney Docket No. 05725.0932-01000  
Filed: November 22, 2004

1. (Original) A structured composition comprising at least one volatile solvent, the liquid fatty phase being structured by at least one polymer with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having hydrocarbonaceous repeat units provided with at least one heteroatom and b) at least one optionally functionalized pendant and/or end fatty chain having from 6 to 120 carbon atoms which is bonded to these hydrocarbonaceous units, the liquid fatty phase and the polymer forming a physiologically acceptable medium.

2-42. (Canceled).



PENDING CLAIMS  
Application No. 10/993,430  
Attorney Docket No. 05725.1003-01000  
Filed: November 22, 2004

Claim 1 (original): Composition comprising, in a physiologically acceptable medium, at least one first polymer with a weight-average molecular mass of less than 100,000, comprising a) a polymer skeleton containing hydrocarbon-based repeating units containing at least one hetero atom, and optionally b) at least one pendent fatty chain and/or at least one terminal fatty chain, which may be functionalized, containing from 6 to 120 carbon atoms and being linked to these hydrocarbon-based units, and a dispersion of particles of a second film-forming polymer that is insoluble in said medium.

Claims 2-56 (canceled).



PENDING CLAIMS  
Application No. 10/990,475  
Attorney Docket No. 05725.1004-01000  
Filed: November 18, 2004

1. (Original) The use of an effective amount of a first polymer with a weight-average molecular mass of less than 100 000, comprising a) a polymer skeleton containing hydrocarbon-based repeating units containing at least one hetero atom, and optionally b) at least one pendent fatty chain and/or at least one terminal fatty chain, which may be functionalized, containing from 6 to 120 carbon atoms and being linked to these hydrocarbon-based units, in a make-up composition comprising a physiologically acceptable medium containing a fatty phase, as an agent for increasing the speed of achieving a make-up result on keratin materials and/or for increasing the adhesion to said keratin materials and/or for rapidly increasing the amount of make-up deposited on the keratin materials.

2-76. (Cancelled)





PENDING CLAIMS  
Application No. 11/019,382  
Attorney Docket No. 05725.1378-00000  
Filed: December 23, 2004

1. A composition comprising
  - i) at least one liquid fatty phase,
  - ii) at least one first polymer comprising
    - a) a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom, and
    - b) at least one of:
      - at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one terminal fatty chain is bonded to the polymer skeleton via at least one ester linking group; and
      - at least one pendant fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one pendant fatty chain is bonded to the polymer skeleton via at least one ester linking group, and
  - iii) at least one second polymer, different from the first polymer, comprising
    - a) a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom, and
    - b) at least one of:
      - at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one terminal fatty chain is

bonded to the polymer skeleton via at least one amide linking group; and

- at least one pendant fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one pendant fatty chain is bonded to the polymer skeleton via at least one amide linking group,

wherein the second polymer does not comprise an ester linking group.

2. A composition according to claim 1, wherein the at least one first polymer further comprises at least one of:

- at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one terminal fatty chain is bonded to the polymer skeleton via at least one linking group; and
- at least one pendant fatty chain chosen from alkyl chains and alkenyl chains,

wherein the at least one pendant fatty chain is bonded to the polymer skeleton via at least one linking group.

3. A cosmetic composition comprising

- i) at least one liquid fatty phase,
- ii) at least one first polymer comprising

a) a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom, and

b) at least one of:

- at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one terminal fatty

chain is bonded to the polymer skeleton via at least one linking group; and

- at least one pendant fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one pendant fatty chain is bonded to the polymer skeleton via at least one linking group,

wherein the at least one first polymer and the at least one second polymer are each present in a sufficient amount to render the composition stable, and

wherein the at least one liquid fatty phase is structured by at least one of the at least one first polymer and the at least one second polymer.

4. The composition according to claim 1, wherein the at least one first polymer or at least one second polymer comprises at least one polyamide block or is a polyamide polymer.

5. The composition according to claim 1, wherein the at least one first polymer or at least one second polymer comprises at least one terminal fatty chain.

6. The composition according to claim 5, wherein the at least one terminal fatty chain is chosen from alkyl chains and alkenyl chains, each comprising at least four carbon atoms.

7. The composition according to claim 6, wherein the alkyl chains and the alkenyl chains each comprise from 12 to 68 carbon atoms.

8. The composition according to claim 1, wherein the at least one linking group of the at least one first polymer is an ester group present in a proportion ranging from 15%

to 40% of the total number of all ester and heteroatom groups in the at least one first polymer.

9. The composition according to claim 1, wherein the at least one linking group of the at least one first polymer is an ester group present in a proportion ranging from 20% to 35% of the total number of all ester and heteroatom groups in the at least one first polymer.

10. The composition according to claim 1, wherein in the at least one first polymer, the percentage of the total number of fatty chains ranges from 40% to 98% relative to the total number of all repeating units and fatty chains in the at least one first polymer.

11. The composition according to claim 1, wherein in the at least one first polymer, the percentage of the total number of fatty chains ranges from 50% to 95% relative to the total number of all repeating units and fatty chains in the at least one first polymer.

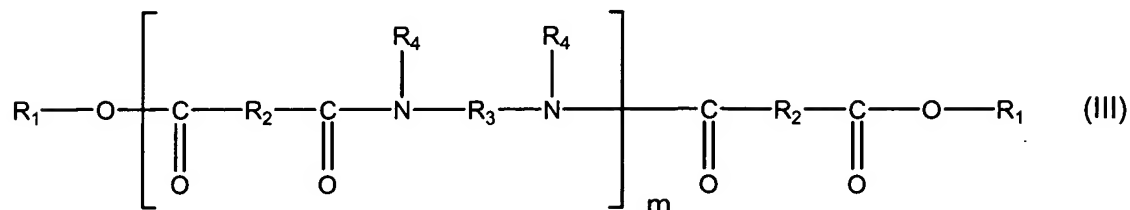
12. The composition according to claim 1, wherein the at least one hydrocarbon-based repeating unit of the first polymer comprises from 2 to 80 carbon atoms.

13. The composition according to claim 1, wherein the at least one heteroatom of the at least one hydrocarbon-based repeating unit of the at least one first polymer is chosen from nitrogen, sulfur, and phosphorus.

14. The composition according to claim 13, wherein the at least one heteroatom is a nitrogen atom.

15. The composition according to claim 1, wherein the at least one heteroatom of the at least one first polymer, taken together with at least one oxygen atom, forms an amide group.

16. The composition according to claim 1, wherein the at least one first polymer is chosen from polyamide polymers of formula (III):



wherein:

- m is an integer which represents the number of amide units such that the number of ester groups present in the at least one polyamide polymer ranges from 10% to 50% of the total number of all the ester groups and all the amide groups comprised in the at least one polyamide polymer;

- R<sub>1</sub>, which are identical or different, are each independently chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;

- R<sub>2</sub>, which are identical or different, are each independently chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups, with the proviso that at least 50% of all R<sub>2</sub> groups are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;

- R<sub>3</sub>, which may be identical or different, are each independently chosen from organic groups comprising at least two carbon atoms, in addition to hydrogen atoms, and optionally comprising at least one atom chosen from oxygen atoms and nitrogen atoms; and

- R<sub>4</sub>, which are identical or different, are each independently chosen from hydrogen atoms, C<sub>1</sub> to C<sub>10</sub> alkyl groups and a direct bond to at least one group chosen from R<sub>3</sub> and another R<sub>4</sub> such that when the at least one group is chosen from another

R<sub>4</sub>, the nitrogen atom to which both R<sub>3</sub> and R<sub>4</sub> are bonded forms part of a heterocyclic structure defined in part by R<sub>4</sub>-N-R<sub>3</sub>, with the proviso that at least 50% of all R<sub>4</sub> are chosen from hydrogen atoms.

17. The composition according to claim 16, wherein m is an integer ranging from 1 to 5.

18. The composition according to claim 16, wherein R<sub>1</sub>, which are identical or different, are each chosen from C<sub>16</sub> to C<sub>22</sub> alkyl groups.

19. The composition according to claim 16, wherein R<sub>2</sub>, which are identical or different, are each chosen from C<sub>10</sub> to C<sub>42</sub> hydrocarbon based groups, with the proviso that at least 50% of all R<sub>2</sub> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon based groups.

20. The composition according to claim 16, wherein R<sub>3</sub>, which are identical or different, are each chosen from C<sub>2</sub> to C<sub>12</sub> hydrocarbon-based groups.

21. The composition according to claim 16, wherein R<sub>4</sub>, which are identical or different, are each chosen from hydrogen atoms.

22. The composition according to claim 1, wherein the at least one first polymer has a weight-average molecular mass ranging from 1000 to 30,000.

23. The composition according to claim 1, wherein the at least one first polymer has a softening point greater than 50 °C and less than 150 °C.

24. The composition according to claim 1, wherein the at least one first polymer is present in the composition in an amount ranging from 0.5% to 80% by weight relative to the total weight of the composition.

25. The composition according to claim 1, wherein the at least one second polymer is a resin composition prepared by reacting components comprising dibasic acid, diamine, polyol and monoalcohol, wherein:

i) at least 50 equivalent percent of the dibasic acid comprises polymerized fatty acid;

ii) at least 50 equivalent percent of the diamine comprises ethylenediamine;

iii) 10 to 60 equivalent percent of the total of the hydroxyl and amine equivalents provided by diamine, polyol and monoalcohol are provided by monoalcohol; and

iv) no more than 50 equivalent percent of the total of the hydroxyl and amine equivalents provided by diamine, polyol and monoalcohol are provided by polyol.

26. The composition of claim 25, wherein polymerized fatty acid comprises at least 75 equivalent percent of the acid equivalents of the dibasic acid.

27. The composition of claim 25, wherein polymerized fatty acid comprises at least 90 equivalent percent of the acid equivalents of the dibasic acid.

28. The composition of claim 25, wherein ethylenediamine comprises at least 75 equivalent percent of the amine equivalents from diamine.

29. The composition of claim 25, wherein polymerized fatty acid comprises at least 75 equivalent percent of the acid equivalents of the dibasic acid, and ethylenediamine comprises at least 75 equivalent percent of the amine equivalents of diamine.

30. The composition of claim 25, wherein the monoalcohol reactant comprises an alcohol of the formula  $R_3\text{-OH}$  and  $R_3$  is a hydrocarbon group.

31. The composition of claim 30, wherein  $R_3$  is chosen from alkyl and aralkyl groups.

32. The composition of claim 25, wherein the monoalcohol is chosen from decanol, 1-dodecanol, tetradecanol, hexadecanol, octadecanol (stearyl alcohol), behenyl alcohol and linear wax alcohols comprising from 22 to 70 carbon atoms.

33. The composition of claim 25, wherein the polyol is of the formula  $R_4-(OH)_n$  wherein  $R_4$  is an n-valent organic group.

34. The composition of claim 33, wherein  $R_4$  is a  $C_2$ - $C_{20}$  organic group without hydroxyl substitution.

35. The composition of claim 33, wherein n is chosen from 2, 3, 4, 5 and 6.

36. The composition of claim 25, wherein the polyol is chosen from ethylene glycol, propylene glycol, butylene glycol, glycerol, trimethylolpropane, pentaerythritol, neopentyl glycol, tris(hydroxymethyl)methanol, di-pentaerythritol, and tri-pentaerthritol.

37. The composition of claim 25, wherein the amine equivalents from diamine equal 0.3 to 0.75 of the total amine and hydroxyl equivalents provided by diamine, polyol and mono-alcohol.

38. The composition of claim 25, wherein the hydroxyl equivalents from polyol equal 0.05 to 0.45 of the total amine and hydroxyl equivalents provided by diamine, polyol and mono-alcohol.

39. The composition of claim 25, wherein the hydroxyl equivalents from mono-alcohol equal 0.20 to 0.45 of the total amine and hydroxyl equivalents provided by diamine, polyol and mono-alcohol.

40. The composition of claim 25, wherein the dibasic acid reactant comprises co-diacid chosen from 1,4-cyclohexane dicarboxylic acid, isophthalic acid, adipic acid, azelaic acid, sebacic acid, and dodecandioic acid.





wherein:

n is an integer from 1 to 30,

R'<sub>1</sub>, which are identical or different, are each independently a fatty chain chosen from alkyl groups comprising at least one carbon atom and alkenyl groups comprising at least two carbon atoms;

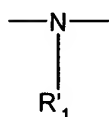
R'<sub>2</sub>, which are identical or different, are each independently chosen from C<sub>1</sub> to C<sub>52</sub> hydrocarbon diradicals;

R'<sub>3</sub>, which may be identical or different, are each independently chosen from organic groups comprising at least two carbon atoms, in addition to hydrogen atoms, and optionally comprising at least one atom chosen from oxygen atoms and nitrogen atoms;

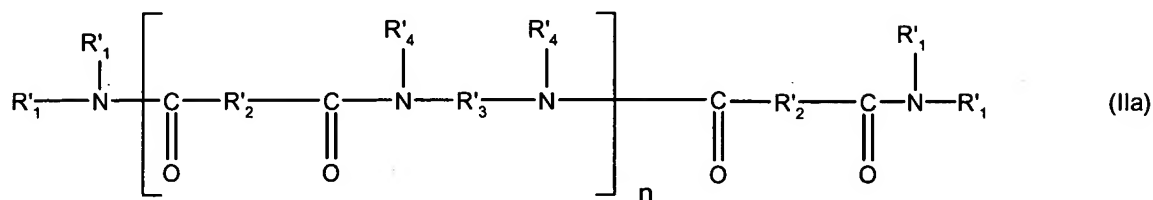
R'<sub>4</sub>, which are identical or different, are each independently chosen from hydrogen atoms, C<sub>1</sub> to C<sub>10</sub> alkyl groups and a direct bond to at least one group chosen from R'<sub>3</sub> and another R'<sub>4</sub>, such that when the at least one group is chosen from another R'<sub>4</sub>, the nitrogen atom to which both R'<sub>3</sub> and R'<sub>4</sub> are bonded forms part of a heterocyclic structure defined in part by R'<sub>4</sub>-N-R'<sub>3</sub>, with the proviso that at least 50% of all R'<sub>4</sub> are chosen from hydrogen atoms; and

L represents a linking group, which is substituted by at least one R'<sub>1</sub> group as defined above.

48. The composition according to claim 47, wherein the at least one second polymer is chosen from polyamide polymers of formula (II) wherein L is a group of formula:



is chosen from polyamide polymers of formula (IIa):



wherein:

n designates a number of repeating units such that terminal amide groups comprise from 10% to 50% of the total amide groups;

R<sub>1</sub> at each occurrence is independently chosen from a C<sub>1-22</sub> hydrocarbon group;

R<sub>2</sub> at each occurrence is independently chosen from a C<sub>2-42</sub> hydrocarbon group;

R'<sub>3</sub> at each occurrence is independently chosen from an organic group comprising at least two carbon atoms in addition to hydrogen atoms, and optionally comprising at least one atom chosen from oxygen and nitrogen atoms; and

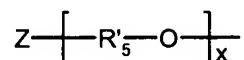
R<sub>4</sub> at each occurrence is independently chosen from hydrogen, C<sub>1-10</sub> alkyl and a direct bond to R<sub>3</sub> or another R<sub>4</sub> such that the N atom to which R<sub>3</sub> and R<sub>4</sub> are both bonded is part of a heterocyclic structure defined in part by R<sub>4</sub>–N–R<sub>3</sub>.

50. The composition of claim 49, wherein R'<sub>1</sub>, at each occurrence, is independently chosen from a C<sub>4</sub>-C<sub>22</sub> hydrocarbon group.

51. The composition of claim 49, wherein R'<sub>2</sub>, at each occurrence, is independently chosen from a C<sub>4</sub>-C<sub>42</sub> hydrocarbon group.

52. The composition of claim 49, wherein R'<sub>3</sub>, at each occurrence, is independently chosen from a C<sub>2</sub>-C<sub>42</sub> hydrocarbon group, where at least 50% of the R'<sub>2</sub> groups comprise from 30 to 42 carbon atoms.

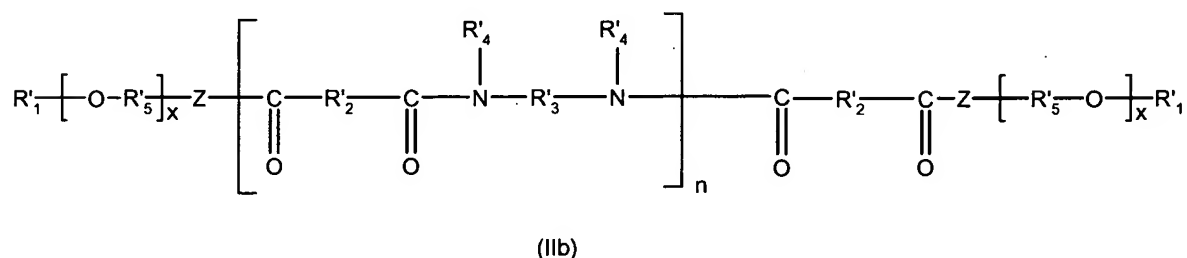
53. The composition according to claim 47, wherein the at least one second polymer is chosen from polyamide polymers of formula (II), wherein L is a group of formula:



wherein

- R'<sub>5</sub> is chosen from C<sub>2</sub>-C<sub>6</sub> hydrocarbon diradicals;
- Z is chosen from O and NH; and
- x is an integer ranging from 2 to 100.

54. The composition according to claim 53, wherein the at least one second polymer is chosen from polyamide polymers of formula (IIb):



wherein

R'<sub>1</sub>, which are identical or different, are each independently chosen from C<sub>1</sub>-C<sub>22</sub> alkyl and C<sub>1</sub>-C<sub>22</sub> alkylene radicals;

Z are chosen from O and NH;

x is an integer ranging from 2 to 100;

R'<sub>2</sub>, which are identical or different, are each independently chosen from C<sub>2</sub> to C<sub>52</sub> hydrocarbon diradicals, wherein at least 50% of the R'<sub>2</sub> comprise at least 34 carbon atoms;

R'<sub>3</sub>, which are identical or different, are each independently chosen from C<sub>2</sub>-C<sub>36</sub> hydrocarbon diradicals and C<sub>4</sub>-C<sub>100</sub> polyether diradicals;

R'<sub>4</sub>, which are identical or different, are each independently chosen from hydrogen atoms, C<sub>1</sub> to C<sub>10</sub> alkyl groups and a direct bond to at least one group chosen from R'<sub>3</sub> and another R'<sub>4</sub> such that when at least one group is chosen from another R'<sub>4</sub>, the nitrogen atom to which both R'<sub>3</sub> and R'<sub>4</sub> are bonded forms part of a heterocyclic structure defined in part by R'<sub>4</sub>-N-R'<sub>3</sub>, with the proviso that at least 50% of all R'<sub>4</sub> are chosen from hydrogen atoms;

R'<sub>5</sub> are chosen from C<sub>2</sub>-C<sub>6</sub> hydrocarbon diradicals; and

n is an integer ranging from 1 to 10.

55. The composition according to claim 54, wherein Z is NH.

56. The composition according to claim 54, wherein R'<sub>5</sub> is a C<sub>2</sub> hydrocarbon diradical.

57. The composition according to claim 54, wherein at least 80% of the R'<sub>2</sub> diradicals comprise at least 34 carbon atoms.

58. The composition according to claim 54, wherein the R'<sub>3</sub> group is a polyether.

59. The composition according to claim 1, wherein the at least one first polymer is present in the composition in an amount ranging from 0.5% to 80% by weight relative to the total weight of the composition.

60. The composition according to claim 59, wherein the at least one first polymer is present in the composition in an amount ranging from 2% to 60% by weight relative to the total weight of the composition.

61. The composition according to claim 60, wherein the at least one first polymer is present in the composition in an amount ranging from 5% to 40% by weight relative to the total weight of the composition.

62. The composition according to claim 61, wherein the at least one first polymer is present in the composition in an amount ranging from 5% to 25% by weight relative to the total weight of the composition.

63. The composition according to claim 62, wherein the at least one first polymer is present in the composition in an amount ranging from 5% to 15% by weight relative to the total weight of the composition.

64. The composition according to claim 1, wherein the at least one second polymer is present in the composition in an amount ranging from 0.5% to 80% by weight relative to the total weight of the composition.

65. The composition according to claim 64, wherein the at least one second first polymer is present in the composition in an amount ranging from 2% to 60% by weight relative to the total weight of the composition.

66. The composition according to claim 65, wherein the at least one second first polymer is present in the composition in an amount ranging from 5% to 40% by weight relative to the total weight of the composition.

67. The composition according to claim 66, wherein the at least one second first polymer is present in the composition in an amount ranging from 5% to 25% by weight relative to the total weight of the composition.

68. The composition according to claim 67, wherein the at least one second first polymer is present in the composition in an amount ranging from 5% to 15% by weight relative to the total weight of the composition.

69. A composition according to claim 1, wherein the ratio of the at least one first polymer to the at least one second polymer ranges from 1/10 to 10/1.

70. A composition according to claim 69, wherein the ratio of the at least one first polymer to the at least one second polymer ranges from 1/5 to 5/1.

71. A composition according to claim 70, wherein the ratio of the at least one first polymer to the at least one second polymer ranges from 1/2 to 4/1.

72. A composition according to claim 71, wherein the ratio of the at least one first polymer to the at least one second polymer is 1/1.

73. A composition according to claim 70, wherein the ratio of the at least one first polymer to the at least one second polymer ranges from 4/1 to 5/1.

74. A composition according to claim 71, wherein the ratio of the at least one first polymer and the at least one second polymer is 3/1.

75. A composition according to claim 1, wherein the at least one first polymer has a softening point from 70 °C to 100 °C.

76. A composition according to claim 1, wherein the at least one second polymer has a softening point from 80 °C to 110 °C.

77. A composition according to claim 1, wherein the composition is free of wax.

78. The composition according to claim 1, wherein the at least one liquid fatty phase of the composition comprises at least one oil chosen from at least one polar oil and at least one apolar oil, and wherein the at least one oil has an affinity for the at least one first polymer.

79. The composition according to claim 78, wherein the at least one polar oil is chosen from:

- hydrocarbon-based plant oils with a high content of triglycerides comprising fatty acid esters of glycerol, wherein the fatty acids comprise chains comprising

from 4 to 24 carbon atoms, said chains being optionally chosen from linear and branched, and saturated and unsaturated chains;

- synthetic oils or esters of formula  $R_5COOR_6$ , wherein  $R_5$  is chosen from linear and branched fatty acid residues comprising from 1 to 40 carbon atoms, and  $R_6$  is chosen from alkyl groups comprising from 1 to 40 carbon atoms, with the proviso that  $R_5 + R_6 \geq 10$ ;
- synthetic ethers comprising from 10 to 40 carbon atoms;
- $C_8$  to  $C_{26}$  fatty alcohols; and

80.-  $C_8$  to  $C_{26}$  fatty acids. The composition according to claim 78, wherein the at least one apolar oil is chosen from:

- silicone oils chosen from volatile and non-volatile, linear and cyclic polydimethylsiloxanes that are liquid at room temperature;
- polydimethylsiloxanes comprising alkyl or alkoxy groups, wherein each alkyl or alkoxy group is independently chosen from being pendant and being at the end of the silicone chain, and wherein the groups each comprise from 2 to 24 carbon atoms;
- phenylsilicones; and
- hydrocarbons chosen from linear and branched, volatile and non-volatile hydrocarbons of synthetic and mineral origin.

81. The composition according to claim 1, wherein the composition comprises at least one coloring agent chosen from pigments and dyes.

82. The composition according to claim 1, wherein the composition is in the form of a cosmetic composition.



83. The composition according to claim 82, wherein the composition is in the form of a treating shampoo product, a hair conditioning product, a sunscreen product, or a skin care formula.

84. The composition according to claim 82, wherein the composition is in the form of a colored make-up product for the skin, an eyeshadow, a concealer, an eyeliner, a make-up for the body, a nail varnish, a make-up for the lips, a make-up for eyelashes, and a make-up for the eyebrows.

85. The composition according to claim 84, wherein a make-up for the lips is chosen from lipgloss and lipstick.

86. The composition according to claim 1, wherein the composition is in a form chosen from an emulsion, an oil-in-water emulsion, a water-in-oil emulsion, an oil-in-water-in-oil emulsion, a water-in-oil-in-water emulsion, a solid gel, a supple gel, and an anhydrous composition.

87. A make-up composition comprising

i) at least one liquid fatty phase:

ii) at least one first polymer comprising

a) a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom, and

b) at least one terminal fatty chain that is bonded to the polymer skeleton via at least one ester linking group; and

iii) at least one second polymer comprising

a) a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom, and

b) at least one terminal fatty chain that is bonded to the polymer skeleton via at least one linking group different from an ester group.

88. The composition according to claim 87, wherein the composition is in the form of a lipstick.

89. A method for care or make up of a keratin material chosen from lips, skin, and keratinous fibers, comprising applying to the keratin material a cosmetic composition comprising

i) at least one liquid fatty phase,  
ii) at least one first polymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom, and

iii) at least one second polymer, different from the first polymer, comprising

a) a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom, and

b) at least one of:

- at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one terminal fatty chain is bonded to the polymer skeleton via at least one linking group; and
- at least one pendant fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one pendant fatty chain is bonded to the polymer skeleton via at least one linking group,

wherein the at least one first polymer and the at least one second polymer are each present in a sufficient amount to render the composition stable, and

wherein the at least one liquid fatty phase is structured by at least one of the at least one first polymer and the at least one second polymer.

90. A method for providing stability to a cosmetic composition comprising at least one liquid fatty phase, comprising including in the cosmetic composition:

ii) at least one first polymer comprising

a) a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom, and

b) at least one of:

- at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one terminal fatty chain is bonded to the polymer skeleton via at least one linking group; and
- at least one pendant fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one pendant fatty chain is bonded to the polymer skeleton via at least one linking group, and

iii) at least one second polymer, different from the first polymer, comprising

a) a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one heteroatom, and

b) at least one of:

- at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one terminal fatty chain is bonded to the polymer skeleton via at least one linking group; and

- at least one pendant fatty chain chosen from alkyl chains and alkenyl chains, wherein the at least one pendant fatty chain is bonded to the polymer skeleton via at least one linking group.

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